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A BIBLIOGRAPHY OF
AMERICAN NATURAL HISTORY
VOL. II

A Bibliography of

American Natural History

The Pioneer Century, 1769-1865

The Rôle Played by the Scientific Societies; Scientific Journals; Natural History Museums and Botanic Gardens; State Geological and Natural History Surveys; Federal Exploring Expeditions in the RISE AND PROGRESS OF AMERICAN BOTANY, GEOLOGY, MINERALOGY, PALEONTOLOGY AND ZOOLOGY

BY

MAX MEISEL, B.S., B.L.S.

Formerly of the Science Division, N. Y. Public Library

VOLUME II

The Institutions which have contributed to the Rise and Progress of American Natural History, which were Founded or Organized between 1769 and 1844

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PREFACE

THE plan and scope of this volume are outlined in detail in volume 1 of this Bibliography. While the first volume is concerned principally with the bibliographical aspects of the entire field, the present volume deals with the contributions made by the various individual institutions founded or organized between the years 1769 and 1844 inclusive.

Additional references have been made throughout this volume and the next, to Dr. George P. Merrill's excellent "First one hundred years of American Geology," which is a revised edition of his "Contributions to the history of American Geology," published in 1906 (see v. 1: Annotated Bibliography: MERRILL, G. P. (1)).

A supplementary list of titles to the Annotated Bibliography and the Bibliography of Biographies contained in volume 1 is to be added as an appendix to v. 3, and notice of omissions will be greatly appreciated. This appendix will also contain a list of Errata for the two preceding volumes.

Further acknowledgments for assistance rendered and courtesies extended are made herewith to Dr. W. L. Bryant, the Buffalo Academy of Natural Sciences, Dr. J. C. Merriam, Miss Claribel Barnett, Miss Alice Atwood, and Miss Blanche Gelb.

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Part b

THE INSTITUTIONS WHICH HAVE CONTRIBUTED TO THE RISE AND PROGRESS OF AMERICAN NATURAL HISTORY, WHICH WERE FOUNDED OR ORGANIZED BETWEEN 1769–1865

Arranged chronologically by the respective dates of formation or organization (See Table of Contents)

THE AMERICAN PHILOSOPHICAL SOCIETY, PHILADELPHIA (1769)

History

"The American Philosophical Society held at Philadelphia for Promoting Useful Knowledge" is the oldest scientific institution in the United States, having been founded in 1727 by Franklin as the Junto. Previous to its formation, there had existed in the city of Philadelphia, two small associations, whose object was the advancement of useful knowledge. One was called the "American Philosophical Society" and was formed in 1742, and the other was called "The American Society for Promoting and Propagating Useful Knowledge, in Philadelphia," and was established in 1766.

"These two Societies, on January 2, 1769, were united by the name of the 'The American Philosophical Society, held at Philadelphia for Promoting Useful Knowledge.' In 1771, it consisted of nearly three hundred members. On March 15, 1780, it was incorporated by the Pennsylvania State Legislature. . . . Its library contains ten or eleven thousand volumes, many of them rare and costly, presented by foreign governments and learned societies. . . . There is attached to the Institution a handsome cabinet of minerals and fossils . . ." An account of the Society given by COGSWELL, William in (Amer. Quart. Register. Bost. Nov. 1842. v. 15, p. 176) and extracted from the (Northern Acad. Arts & Sc. Constitution & First Ann. Rept. Hanover, N. H. 1842. p. 16), entitled "The Literary & Scientific Institutions of the U. S."

The date of the formation of the Society was for many years a bone of contention. The first date of the formation has now been definitely decided upon by a Committee of the Society as 1727. (See under 1841—DU PONCEAU in the Bibliography of the Society, below). As an active institution engaged in scientific work it did not accomplish anything until the union of the two organizations on January 2, 1769. See below the "Papers on Natural History" for two papers read in 1768 before one of the earlier organizations. For the purposes of this Bibliography, 1769 has been regarded as the date of foundation and references as such have been made to it.

For a record of the Proceedings from the year 1744 to the year 1838, when it began the publication of regular volumes covering the Proceedings see Proc. v. 22, appendix, 1884. The Proceedings and minutes of the Societies prior to their union in 1769 are covered on p. 1–22.

The first president was Benjamin Franklin, and the curators were Adam Kuhn, John Morgan and Lewis Nicola. On June 19, 1784, a Botanical garden was ordered to be planted . . . and the Committee, Hopkinson and Rittenhouse ordered to look around for a gardener . . . ["to be planted on 200 feet of the Arch St. lot next to the Observatory."] (Proc. v. 22, appx. p. 126.)

As early as 1784 Charles Willson Peale had begun his famous natural history museum, and as a member of the Society he arranged to associate his Museum with the Society. For a time it was contained in the Philosophical Hall of the Society, and arrangements for same were consummated and agreed upon as noted in the minutes; see (Proc. v. 22, appx. p. 221–22. May 30, 1794.)

In 1785 the State granted a lot to the Society as a site for the erection of its hall. It began early to maintain a library and a cabinet of minerals and other specimens.

At a meeting held February 19, 1802 (Proc. v. 22, appx., p. 321), Mr. C. W. Peale's museum having so much increased, and "from the measures he had taken will probably become so much more numerous, as to render the advantageous display of them in the Hall of the Society no longer practicable. Resolved that this Society, regretting that the small extent of their rooms has rendered the grant of the Senate necessary, cordially recommend to the House of Representatives to add their approbation to the vote of the

Senate as they consider that the Museum may be the foundation of an institution highly serviceable to science and honorable to the state in which it has arisen.'' In 1804 Peale's lease was continued for 10 more years at an annual rental of $300. But in 1811 the Museum was removed to the State House. (Proc. v. 22, appx., p. 431. Dec. 6, 1811). See also Peale's Philadelphia Museum (1784).

In a Memorial to the Senate and the House of Representatives of the State of Pennsylvania, the American Philosophical Society requested financial assistance from the State to aid in the purchase of a building and apparatus, books, etc. Proc. v. 22, appx. p. 291–92, dated Jan. 17, 1800, contains the following extracts from this Memorial. '' . . . In the year 1785 the Society impressed with the importance of possessing, and sensible of the injuries sustained from the want of a building which would afford convenient apartments for holding their meetings in, and be a safe depository for a philosophical apparatus, and for a library, then respectable and ever since increasing, erected at their own expense, assisted by the liberal donations of private individuals, a hall 70 feet in front and fifty feet in depth, on a lot appropriated for that purpose by the Legislature. The expense attending the erection of this building amounted to upwards of $8,000. As the Society had not immediate use for all of the apartments in their hall, they let those that were unoccupied by themselves to Charles Willson Peale for the exclusive object of arranging and displaying the objects of his Museum, and as an encouragement to such an object of such national importance, they entered into a contract with him on terms of studied moderation. They are happy in being able to inform the Legislature that since the removal of the Museum to this Hall its extension has been so rapid as to excite and amply repay the curiosity of men of science.''

Thomas Jefferson and Caspar Wistar were the only presidents between 1769 and 1865 who took a vital and personal interest in natural history matters. A number of their papers appear in the Transactions of the Society (see below Papers on Natural History). Jefferson was also instrumental in having the MS of the expeditions under Lewis & Clark (1804), q.v., that under Pike (1805), q.v., of Dunbar's Exped. to Louisiana (1804), q.v.; and Michaux's MS of his travels in America deposited with the Society. Proc. v. 22, appx. p. 475, Nov. 21, 1817, notes the presentation by Jefferson of the Lewis & Clark MS. Proc. v. 22, appx. p. 472, meeting of July 18, 1817, records the gift from Bishop White and Daniel Parker of Washington, D. C., of the "Original Journals" of Dunbar and his associate Dr. Hunter, and also the gift of the first part of Pike's MS.

The Michaux MS was presented by his son, May 21, 1824, as recorded in Proc. v. 22, appx. p. 530. Thwaites used the Lewis & Clark MS as a basis for his publication of the "Original Journals of Lewis & Clark." [See Lewis & Clark Exped. (1804.)]

In 1818 Muhlenberg's herbarium costing upwards of five hundred dollars, and one of the most important in its day, was donated to the Society (Proc. v. 22, appx. p. 478).

The members of the Society were divided into six committees of which the third constituted the Natural History and Chemistry Committee. Active members in this department never numbered much more than two or three dozen, probably due to the active Academy of Natural Sciences (1812), q.v. In 1854, out of some 362 members, the president of that year mentions that about 20 were naturalists. (Proc. v. 6, p. 67–8. Dec., 1854.)

In 1830, the Society "received the collections of Mexican minerals and antiquities by courtesy of J. R. Poinsett, then American representative in Mexico, and the various earths and fossils developed in the great excavation of the Chesapeake and Delaware Canal, from Andrew A. Dexter, one of the engineers of that work." (Trans. n.s. v. 3, pref. p. 7. 1830.)

In a letter from the Secretary of the Navy, dated August 21, 1836, he requested from the Society, assistance and suggestions as to the "subjects of inquiry and research for the Expedition about to sail for the South Seas, and to suggest a suitable organization for the scientific corps." Action along these lines was at first refused, but a Committee later presented a 36 page resolution concerning the activities of the Expedition. From Proc. v. 22, appx. p. 691, 694, 706. Sept. 7, 1836. (See the Wilkes Explor. Exped. (1838.))

During May 25–30, 1843, the Society held a Centenary celebration, regarding 1743 at that time as the date of its origin. For the Proceedings see its Proc. v. 3, p. 1–36. The scientific papers read at those meetings are contained below in the list of Papers on Natural History (q.v. under 1843).

On November 2, 1849, the curators were authorized by the Society to deposit with the Academy of Natural Sciences of Philadelphia (1812), q.v., as an indefinite loan the fossil organic remains belonging to the Society (Proc. v. 5, no. 44, p. 110–11. Mar., 1850). Further loans were authorized in 1864.

The herbarium of Zaccheus Collins, for many years a curator of the Society, was presented by General Parker on March 21, 1834. (Proc. v. 22, appx. p. 649.)

Its presidents from 1769 through 1865 were:

1769–1791	Benjamin Franklin
1791–1797	David Rittenhouse
1797–1815	Thomas Jefferson
1815–1819	Caspar Wistar
1819–1825	Robert M. Patterson
1825–1828	William Tilghman
1828–1844	Peter S. DuPonceau
1845	Robert M. Patterson
1846–1849	Nathaniel Chapman
1849–1853	Robert M. Patterson
1853–1855	Franklin Bache
1855–1857	Alexander K. Bache
1857–1859	John K. Kane
1859–1880	George B. Wood

Among the active naturalists in its membership who held various offices were:

Vice-presidents: Nicholas Collin, 1795–1798; B. S. Barton, 1802–1815; George Ord, 1832–1835; Isaac Lea, 1858–1868.

Secretaries: W. P. C. Barton, 1817–1819; George Ord, 1821–1827, 1829; C. B. Trego, 1848–1874; J. P. Lesley, 1859–1886; John Le Conte, 1855–1879.

Treasurers: George Ord, 1848–1851; C. B. Trego, 1852–1874.

Curators: Adam Kuhn, 1769; C. W. Peale, 1788–1810; B. S. Barton, 1790–1800; Caspar Wistar, 1792–1794; Zaccheus Collins, 1814–1818; Thomas Say, 1821–1827; Isaac Lea, 1830–1838; Isaac Hays, 1837, 1839–1846; Elias Durand, 1857–1873.

The most important titles relating to its publications, membership, laws and regulations, library, celebrations, indexes of papers published in its Transactions and Proceedings, and finally of its History are contained in the BIBLIOGRAPHY of the Society below.

The titles of the papers read before the Society or printed in its publications, the Transactions (T), new and old series, and in its Proceedings (P), are arranged chronologically by their date of reading. Most of the papers with reference to Proc. v. 22, appx.

are only titles, and are included primarily to give an idea of the scope of the work done along natural history lines by the Society, and of the members engaged in natural history studies.

With the founding of the Academy of Natural Sciences at Philadelphia in 1812 (q.v.), the American Philosophical Society naturally began to devote less and less time to the pursuit of natural history studies, as most of the naturalists of the Society were active members of the Academy, especially those who were resident in Philadelphia. However, its Transactions and Proceedings contain frequent and in many instances long and important communications relative to the fields of botany, zoology, geology, mineralogy and anthropology.

Bibliography

1771 AMERICAN PHILOSOPHICAL SOCIETY, Philadelphia. Transactions. . . . Philadelphia, 1771–date. v. 1 (Old series)–date. 4°.

For the dates of publication of these volumes see below under TRANSACTIONS (T). Includes those pub. between 1771 and 1869; v. 1–6 (old ser.); & v. 1–13 (new ser.)

1819 ————. Transactions of the Historical and Literary Committee of the . . . Philadelphia, A. Small, 1819–45. 3 v.

Only pt. 1 of v. 3 was ever pub.

1824 ————. Catalogue of the Library of the . . . held at Philadelphia for promoting useful knowledge; published by order of the Society. Philadelphia, printed by J. R. A. Skerrett, 1824. 15 + 290 p.

1838 ————. Proceedings. . . . Philadelphia, 1838–date. v. 1–date.

For the dates of the publication of these volumes which appeared in numbers quite irregularly, see below under PROCEEDINGS (P). They include v. 1–10, 1838–1869, & also P. v. 22, appx. which contains Proceedings between 1744–1838. See below in this Bibliography under 1884.

————. List of the members of the . . . held at Philadelphia for promoting useful knowledge; from its establishment, second of January, 1769, to the 20th of April, 1838. Philadelphia, J. & W. Kite, printers, 1838. 23 p.

Gives the dates of death of deceased members, etc. Numerous subsequent ed. bringing the material and statistics up-to-date.

1841 DU PONCEAU, Peter Stephen. An historical account of the origin and formation of the American Philosophical Society held at Philadelphia for promoting useful knowledge, by . . . Peter Stephen Du Ponceau, president of the Society; with the communication of J. Francis Fisher, Esq., and the report of the committee to which these papers were referred, read Oct. 15, 1841; the report of the committee on the date of the foundation of the Society, accepted May 1, 1914. Philadelphia, The American Philosophical Society, 1914. 196 p.

The year 1727 was definitely decided upon as the year of the actual foundation of the Society. Present letter-heads of the Society bear this date. Du Ponceau's paper appears on p. 3–51; Fisher's on p. 143–63; & that of the Committee, 1914, on p. 164–96. Report of Committee on Du Ponceau's paper, p. 53–98.

1843 AMERICAN PHILOSOPHICAL SOCIETY, Philadelphia. Proceedings of the . . . held at Philadelphia for promoting useful knowledge: celebration of its hundredth anniversary, May 25, 1843. (In its Proc. v. 3, p. 1–36. May, 1843)

1860 ————. Laws and regulations of the . . . held at Philadelphia for promoting useful knowledge, as finally amended and adopted, together with the charter of the Society and a list of its members. Philadelphia, J. C. Clark, 1860. 80 p.

1862 PRICE, Eli K[irk] . . . Supreme Court: the City of Philadelphia v. the American Philosophical Society; the Hall of the American Philosophical Society is not liable to taxation. (In its Proc. v. 9, no. 67, p. 14–24. April, 1862)

Gives a good account of the history of the Society with its relation to the state and the reasons for the exemption of the property of the Society from taxation. Rd April 4, 1862 before the Society.

1863 AMERICAN PHILOSOPHICAL SOCIETY, Philadelphia. Catalogue of the American Philosophical Society library. . . . Philadelphia, 1863–84. 1390 p.

In 4 parts, compiled by J. P. Lesley, librarian.

1865 ————. List of the members of the . . . held at Philadelphia for promoting useful knowledge . . . [Philadelphia, 1865.] 56 p.

Dates of birth & death of members between 1769–1865.

1880 ————. . . . Proceedings at the dinner commemorative of the centennial anniversary of the incorporation of the Society, held at St. George Hotel, Philadelphia. . . . Philadelphia, The American Philosophical Society, 1880. 84 p.

1884 [LESLEY, John Peter, and PHILLIPS, Henry, Jr.] Early proceedings of the American Philosophical Society, held at Philadelphia for promoting useful knowledge, compiled by one of the secretaries from the manuscript minutes of its meetings from 1744 to 1838. Philadelphia, Press of McCalla & Stavely, 1884. 3 + 875 p. 6 pl. facsim. (In its Proc. v. 22, pt. 3. appx. July, 1885)

Although begun by Lesley, it was completed and brought out under the supervision of Henry Phillips, Jr.

1889 AMERICAN PHILOSOPHICAL SOCIETY, Philadelphia. . . . Proceedings commemorative of the centennial anniversary of the first occupation of the Hall of the Society, November 21, 1889 . . . Philadelphia, Nov. 21, 1889. 213 p. (In its Proc. v. 27, no. 131)

Commemoration of the Centennial, p. 1–52. Laws & regulations up to 1885, p. 53–82. List of the officers & councilors, 1769–1890; p. 83–120.

List of members: 1769–January 17, 1890; p. 121–200.

1889 PHILLIPS, Henry, Jr. Subject register of papers published in the Transactions and Proceedings of the American Philosophical Society. . . . Philadelphia, McCalla & co., 1889. 75 p.

Includes Trans. v. 1–6 (old ser.) & v. 1–16 (new ser.) & Proc. v. 1–25.

A previous index was pub. Philadelphia, 1884. 56 p. Includes Trans. v. 1–6 (old ser.) & v. 1–15 (new ser.) & Proc. v. 1–20.

1893 AMERICAN PHILOSOPHICAL SOCIETY, Philadelphia. 1743–1893: Proceedings commemorative of the one hundred and fiftieth anniversary of the foundation of the . . . May 22–26, 1893. (In its Proc. v. 32, no. 143. p. 1–160. 1893)

Appx. contains scientific papers read at the Anniversary.

1900 ————. Proceedings . . . Memorial volume I. Phila. The Society, 1900. 316 p. port.

Biographical sketches of deceased members.

1902 OBERHOLTZER, E[llis] P[axon]. Franklin's Philosophical Society. (In Popular Sc. Monthly. v. 60, p. 430–37. Feb. 1902)

1903 ROSENGARTEN, J[oseph] G[eorge]. The American Philosophical Society: 1743–1903. (In Pennsylvania Mag. Hist. & Biog. v. 27, no. 3, p. 329–36. 1903)

1907 ————. The early French members of the American Philosophical Society. (In their Proc. v. 46, p. 87–93. Jan.–Mar. 1907).

1908 ————. The American Philosophical Society. Philadelphia, 1908. 19 p.

Repr. from the Founder's Week Memorial volume.

1912 AMERICAN PHILOSOPHICAL SOCIETY, Philadelphia. General index to the Proceedings of the . . . volumes 1–50, 1838–1911. Philadelphia, The American Philosophical Society, 1912. 83 p.

Transactions (T)

Dates of Publication

v. 1	1771	ed. 1, 28 + 19 + 340 p.
	1789	ed. 2, 24 + 407 p.
v. 2	1786	32 + 397 + [10] p.
v. 3	1793	40 + [370] p.

	v. 4	1799	44 + [534] + 42 p. (Contains Index to v. 1–4)
	v. 5	1802	23 + 328 p
	v. 6	1809	[52] + 428 + 15 p. (pt. 1, p. 1–190; 1804) (pt. 2, p. 191–428; 1809)
n.s.	v. 1	1818	24 + 47 + 454 p. 13 pl. map.
“	2	1825	15 + [504] p. 10 pl.
“	3	1830	12 + [512] p. 18 pl.
“	4	1834	[14] + 524 p. 29 pl.
“	5	1837	15 + 482 p. 24 pl.
“	6	1839	11 + 427 p. 30 pl.
“	7	1841	12 + 502 p. 12 pl.
“	8	1843	11 + 357 p. 26 pl.
“	9	1846	8 + 413 p. 47 pl.
“	10	1853	11 + 508 p. 38 pl.
“	11	1860	28 + [403] p. 12 pl.
“	12	1863	[8] + 594 p. 2 pl. map.
“	13	1869	[8] + 466 p. 27 pl.

Proceedings (P)

Dates of Publication

v. 22, appx.	For	1744–1838	pub.	1884	875 p. 6 pl. facsim.
1, no. 1–14	For	1838–1840	pub.	1840	336 p.
2, no. 15–26	“	1841–June, 1843	“	1843	282 p.
3, no. 27	“	May 25–30, 1843	“	1843	232 p.
4, no. 28–39	“	June, 1843–Dec. 1847	“	1847	388 p.
5, no. 40–50	“	1848–1853	“	1854	367 p.
6, no. 51–60	“	1854–1858	“	1859	396 p.
7, no. 61–64	“	1859–1860	“	1861	421 p.
8, no. 65–66	“	1861	“	1862	418 p.
9, no. 67–72	“	1862–1864	“	1865	509 p.
10, no. 73–80	“	1865–1868	“	1869	586 p.

An Abstract of the Proc. v. 1 appears in
Amer. Jour. Sc. (1818), v. 38, p. 153–93. Dec. 1839.
v. 39, p. 361–73. Oct. 1840.
v. 40, p. 27–59. Jan. 1841.
p. 374–86. Apr. 1841.

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1768 Bartram, Moses. Observations on the native silk[s] worms of North America. T. v. 1, sect. 2, p. 224–30. Rd Mar. 11.

In 2d ed. T. v. 1, p. 294–301.

CARTER, Landon. Observations concerning the fly-weevil that destroys the wheat; with some useful discoveries and conclusions, concerning the propagation and progress of that pernicious insect, and the methods to be used to prevent the destruction of the grain by it. T. v. 1, sect. 2, p. 205–17. Rd Nov. 15.

Observations on the same subject by the Committee on husbandry, p. 218–23. Written July 23, 1768. Also in the 2d ed. T. v. 1, p. 274–87; 287–94.

1769 LORIMER, J[ohn]. Extracts of a letter . . . to Hugh Williamson, M.D. T. v. 1, sect. 2, p. 250–54. Rd April 21.

Written Jan. 7, 1769. Also in the 2d ed. T. v. 1, p. 320–25. Contains remarks on the climate and vegetable productions of West Florida.

*[ELLIS, John]. Catalogue of such foreign plants as are worthy of being encouraged in our American colonies for the purposes of medicine, agriculture and commerce . . . T. v. 1, sect. 2, p. 255–71. Rd Oct. 19.

Extract from a pamphlet by the author, a Fellow of the Royal Society. ''The Society having thought proper to give a place to the foregoing catalogue; it may be necessary to subjoin some directions, (taken also from Mr. Ellis' pamphlet) for bringing over seeds and plants from distant countries in a state of vegetation.'' p. 263–71.

Also in 2d ed. T. v. 1, p. 325–30; 330–36.

JONES, John. . . . Account of a species of grape vines which he had discovered, different from all others he had ever seen. T. v. 1, sect. 4, p. 339–40.

In 2d ed. T. v. 1, p. 406–7.

CURATORS OF NATURAL HISTORY. A scheme for encreasing the cabinet of natural curiosities. P. v. 22, appx. p. 52, 53–4. Rd Mar. 16 & Apr. 20.

1771 COOPER, Jos[eph]. On the nature of the worms so prejudicial to the peach trees for some years past, and a method for preventing the damage in future, in a letter . . . to M. Clifford. P. v. 22, appx. p. 65. Rd July 19.

Ordered to be pub. in Pa. Gazette & Jour.

1773 BRYANT, William. Account of an electrical eel, or the torpedo of Surinam. T. v. 2, no. 12, p. 166–69. Rd Feb. 5.

GAULD, [George]. A description of the coast of W. Florida. P. v. 22, appx. p. 80–1. Rd July 18.

ROMANS, Bernard. [A description of two non-descript plants, natives of Florida, one of which is denominated Kalmia Floridiana, and the other the Lupinus emiticus seu L. foliisternatis]. P. v. 22, appx. p. 82, 90. Rd Aug. 20.

1774 ARCHER, J. Dissertation of an amphibious animal discovered in [Baltimore Co., Md.] . . . P. v. 22, appx. p. 87. Rd Jan. 21.

Author also sent a stuffed skin of the animal.

ROMANS, Bernard. . . . Description of the Semen Badiananisam stellatum, or Illicium Floridianum. P. v. 22, appx. p. 90. Rd Feb. 18.

1775 HARE, and SKINNER. The whole process of the silk worm, from the egg to the cocoon . . . in a letter . . . to Dr. John Morgan. . . . T. v. 2, no. 41, p. 347–66. Rd July 8.

Written July 27, 1774 & Feb. 24, 1775 from London.

GILPIN, [John]. Specimens of marle from near Wilmington and alum from the Monongahela. P. v. 22, appx. p. 97. Rd Mar. 19.

————. Observations on the annual passage of herrings. T. v. 2, no. 30, p. 236–39. Rd Sept. 15.

A map explanatory of the voyage of the herrings was to have been appended, but is not in the T.

1780 MATLACK, Timothy. On the growth of trees from the bud downwards. P. v. 22, appx. p. 109. Rd June 16.

————. Essay on insects noxious to young chickens. P. v. 22, appx. p. 109. Rd Nov. 17.

1782 *ABOVILLE. Two hearts found in one partridge. T. v. 2, no. 39, p. 330–35. [Rd May 3.]

MORGAN, John. Of a living snake in a living horse's eye, and of the unusual productions of animals. T. v. 2, no. 43, p. 383–91. Rd June 5.

P. v. 22, appx. p. 142 gives May 5, 1786 as the date of reading.

WILLIAMSON, H[ugh]. Observations on the sea coast of North America. P. v. 22, appx. p. 115. Rd Dec. 20.

1783 FLAGG, H. C. Observations on the numb fish, or torporific eel. T. v. 2, no. 13, p. 170–73. Rd Mar. 7.

Written from S. C., Oct. 8, 1782.

MILLER, Peter. Description of the grotto at Swatara . . . communicated by William Barton. T. v. 2, no. 15, p. 177–78. Rd Mar. 7.

HOPKINSON, F[rancis]. Account of a worm in a horse's eye. T. v. 2, no. 18, p. 183–85. Rd Sept. 26.

1784 NICOLA, [Lewis]. Observations on petrified bones found near the Ohio; thigh-bone, tusk and grinder, brought to the city by Maj. Craig. P. v. 22, appx. p. 123. Rd Mar. 5.

BELKNAP, Jeremy. Description of the White Mountains in New Hampshire. T. v. 2, no. 3, p. 42–9. Rd Oct. 15.

1786 HUTCHINS, Tho[mas]. Description of a remarkable rock and cascade, near the western side of the Youghiogeny River, a quarter of a mile from Crawford's Ferry, and about twelve miles from Uniontown, in Fayette County, in the state of Pennsylvania. T. v. 2, no. 4, p. 50–1. Rd Jan. 28.

ANON. A great tooth of some unknown animal found at Tioga, on the Susquehannah, handed over to Mr. Peale to have a drawing made of it. P. v. 22, appx. p. 146. Rd Dec. 1.

1787 SMITH, S. S. On the causes of the diversity of figure and complexion in the human species. P. v. 22, appx. p. 148. Rd Feb. 21.

This was the annual oration.

Matlack, [Timothy], and Wistar, [Caspar]. A large thigh bone found near Woodbury Creek in Glocester county, N. J. [perhaps a Hadrosaurus]. . . . P. v. 22, appx. p. 154. Rd Oct. 5.

1788 Greenway, James. An account of the beneficial effects of the Cassia chamaecrista, in recruiting worn-out lands, and in enriching such as are naturally poor; together with a botanical description of the plant. T. v. 3, no. 27, p. 226–30. Rd May 2.

Franklin, B[enjamin]. Conjectures concerning the formation of the earth, etc. . . . in a letter . . . to the Abbé Soulavie, [Sept. 22, 1782]. T. v. 3, no. 1, p. 1–5. Rd Nov. 21.

1789 Ferguson, W[illiam]. A collection of curious petrifactions and other fossils found in different parts of the western countries, presented by . . . P. v. 22, appx. p. 169. Rd Feb. 20.

Collin, Nicholas. Essay on those inquiries in natural philosophy which at present are most beneficial to the United States of North America. T. v. 3, introd. pref. p. 3–27. Rd April 3.

Inquiries on natural history, p. 15–24.

M'Causlin, Robert. An account of an earthy substance found near the falls of Niagara and vulgarly called the spray of the falls; together with some remarks on the falls. . . . T. v. 3, no. 6, p. 17–24. Rd Oct. 16.

1790 Franklin, B[enjamin]. Queries and conjectures relating to magnetism, and the theory of the earth, in a letter to Mr. Bodoin. T. v. 3, no. 4, p. 10–3. Rd Jan. 15.

Greenway, James. An account of a hill, on the borders of N[orth] Carolina, supposed to have been a volcano, in a letter from a continental officer, residing in that neighborhood, to . . . T. v. 3, no. 28, p. 231–33. Rd Feb. 19.

''Farther remarks,'' by Greenway, read May 18, 1792, p. 233.

————. An account of a poisonous plant growing spontaneously in the southern part of Virginia. . . . T. v. 3, no. 29, p. 234–39. Rd Feb. 19.

Cicuta venerosa; Classis, Pentandria; Ordo, Digynia.

Bradford, Will. A curious vegetable production, being the branch of a radish incorporated with a red beet. . . . P. v. 22, appx. p. 184. Rd Oct. 16.

1791 Muhlenberg, Henry. Index florae Lancastriensis. T. v. 3, no. [21], p. 157–84. Rd Feb. 18.

Written Nov. 17, 1790. Continuation rd Sept. 16, 1796 (q. v. below). His ''Specimen of a Flora Lancastriensis and floral Calendarium'' submitted July 15, 1785.

Matlack, T[imothy]. A large tusk found in the back country. P. v. 22, appx. p. 193. Rd Mar. 18.

Rush, Benjamin. An account of the sugar maple-tree of the United States, and of the methods of obtaining sugar from it, together with observations upon the advantages both public and private of this sugar, in a letter to Thomas Jefferson. . . . T. v. 3, no. 9, p. 64–79. Rd Aug. 19.

MITCHILL, S. L. A short memoir on the wheat insect, or Hessian fly. P. v. 22, appx. p. 195. Rd Aug. 19.

HOLLINGSWORTH, Levi. A stone in which were several petrified shells, etc., found beyond the Blue Mountains, by John Arndt of Easton, in a letter from. . . . P. v. 22, appx. p. 201. Rd Dec. 16.

1792 HEART, Jonathan. A letter to B. S. Barton . . . containing observations on the ancient works of art, the native inhabitants, etc., of the western country. T. v. 3, no. 25, p. 214–22. Rd Feb. 3.

Written Jan. 5, 1791.

*BEAUVOIS, Palisot de. First memoir of observations on the plants denominated Cryptogamick. . . . T. v. 3, no. 24, p. 202–13, 1 pl. [18 fig.]. Rd Feb. 17.

BOYL, Peter. Two specimens of impressions of Echinus, or sea-nettle, in limestone. . . . P. v. 22, appx. p. 204. Rd Mar. 2.

BARTON, B. S. A botanical description of the Podophyllum diphyllum of Linnaeus, now called [Jeffersonia Virginica] in a letter to C. P. Thunberg. T. v. 3, no. 41, p. 334–48, 1 pl. [12 fig.]. Rd May 18.

1793 ————. An inquiry into the question, whether the Apis mellifica, or true honey-bee, is a native of America. T. v. 3, no. 31, p. 241–61. Rd Feb. 1.

1794 COLLIN, [Nicholas]. Plan of a botanical garden and the relative improvement of the museum. P. v. 22, appx. p. 219. Rd Mar. 7.

BARTON, B. S. A memoir concerning the fascinating faculty which has been ascribed to the rattle-snake and other American serpents. T. v. 4, no. 11, p. 74–113. Rd April 4.

Rev. in Med. Repos. (1797), v. 1 (ed. 1), p. 79–87. July, 1797. In v. 1, (ed. 2), & (ed. 3), p. 86–95. 1800 & 1804.

Repr. as separate. Phila. 1796. 70 p. Supplement. Phila. 1800. 40 p.

————. Some account of the poisonous and injurious honey of North America. T. v. 5, no. 7, p. 51–70. Rd July 18.

1795 ANDERSON, James. A disquisition on wool-bearing animals. . . . T. v. 4, no. 16 & 17, p. 149–53, 153–54. Rd [April 3].

Written Dec. 6, 1794.

*BEAUVOIS, Palisot de. Memoir on the subject of a new plant, growing in Pennsylvania, particularly in the vicinity of Philadelphia. T. v. 4, no. 20, p. 173–77. Rd Aug. 21.

Heterandra reniformis.

BARTON, B. S. Some account of an American species of Dipus or Jerboa [Americanus]. T. v. 4, no. 12, p. 114–24, 1 pl. Rd Oct. 2.

Continuation rd Dec. 16, 1803 (q. v. below).

ELLICOTT, Andrew. Miscellaneous observations relative to the western parts of Pennsylvania particularly those in the neighborhood of Lake Erie. . . . T. v. 4, no. 25, p. 224–29. Rd Dec. 4.

1796 *Beauvois, [Palisot] de. Translation of a memoir on a new species of Siren. T. v. 4, no. 33, p. 277–81, 1 pl. Rd Feb. 19.

[Lacertina Operculata]

Heckewelder, John. A letter to Dr Barton, giving some account of the remarkable instinct of a bird called the Nine-killer [Janus exantitor]. . . . T. v. 4, no. 13, p. 124–27. Rd April 1.

Sargent, Winthrop. A letter to Dr B. S. Barton, accompanying drawings and some account of certain articles, which were taken out of an ancient tumulus, or grave, in the western country. T. v. 4, no. 21 & 22, p. 177–80, 2 pl. Rd May 20.

Remarks by George Turner, in T. v. 5, no. 9, p. 74–6. Rd Dec. 6, 1799.

Barton, B. S. Observations and conjectures concerning certain articles which were taken out of an ancient tumulus, or grave, at Cincinnati, in the county of Hamilton, and territory of the United States, northwest of the river Ohio, in a letter to Rev. Joseph Priestley. T. v. 4, no. 23, p. 181–215. Rd May 20.

Muhlenberg, Henry. Supplementum Indicis florae Lancastriensis. T. v. 4, no. 28, p. 235–42. Rd Sept. 16.

Previous part rd Feb. 18, 1791 (q. v. above).

1797 Turner, [George]. List of western curiosities presented by. . . . P. v. 22, appx. p. 251–52. Rd Feb. 24.

Heckewelder, John. A letter to B. S. Barton, containing an account of animal called the big naked bear. . . . T. v. 4, no. 31, p. 260–62. Rd Mar. 10.

Jefferson, Thomas. A memoir on the discovery of certain bones of a quadruped of the clawed kind in the western parts of Virginia. T. v. 4, no. 30, p. 246–60. Rd March 10.

First presented at meeting, Aug. 14, 1796.
See also Wistar's paper rd Mar. 1, 1799 (q.v.).
See also Merrill (1), p. 213, & his First 100 yrs., Amer. Geol., 1924. p. 16.

*Lozieres, Baudry des. A memoir on animal cotton, or the insect fly-carrier. T. v. 5, no. 18, p. 150–59. Rd Mar. 17.

Written Feb. 3, 1797.

*Beauvois, [Palisot] de. Memoir on Amphibia: serpents. T. v. 4, no. 42, p. 362–81, 1 pl. Rd April 7.

Caffery, J. Letter . . . stating that many bones of the Mamoth were to be found at Manscoes Lick near the mouth of the Cumberland River, and offering assistance in collecting and forwarding them to Philadelphia and New York. P. v. 22, appx. p. 258. Rd May 26.

Turner, George. Memoir on the extraneous fossils, denominated Mammoth bones: principally designed to shew that they are the remains of more than one species of non-descript-animal. T. v. 4, no. 74, p. 510–18. Rd July 21.

Coxe, J. R. An inquiry into the comparative effects of the opium officinarum, extracted from the Papaver somniferum or white poppy of Linnaeus; and that procured from the Lactuca sativa, or common cultivated lettuce of the same author. T. v. 4, no. 44, p. 387–414. Rd Nov. 24.

Shultz, Ben. A botanical mode of discriminating between esculent and noxious vegetables. P. v. 22, appx. p. 264, 275. Rd Dec. 1.
Publication of this paper objected to.

1798 *Beauvois, [Palisot] de. Natural curiosities in Greenbriar county, Va., particularly of a tooth of a large non-descript animal. P. v. 22, appx. p. 270–71. Rd May 4.

Turner, [George]. On a non-descript animal called the prairie squirrel. P. v. 22, appx. p. 272, 273. Rd June 15.

Latrobe, B. H. Memoir on the sand hills of Cape Henry in Virginia. T. v. 4, no. 68, p. 439–43. Rd Dec. 21.
Repr. in Amer. J. Sc. (1818), ser. 2, v. 40, p. 261–64. Nov. 1865. See Supplement next entry.

1799 ————. . . . Supplement. . . . T. v. 4, no. 69, p. 444, 1 pl. Rd Jan. 18.
See preceding entry. Memoir & Supplement rev. in Amer. Miner. Jour. v. 1, no. 4, p. 248–52. 1814.

Barton, [B. S.]. Notes, number 1, on the falls of Niagara. P. v. 22, appx. p. 284. Rd in Jan.

Smith, T. P. Account of chrystallized basaltes found in Pennsylvania. T. v. 4, no. 70, p. 445–46. Rd Jan. 18.
See also Merrill, (1), p. 214. (Annot. Bib.)

Williamson, [Hugh]. On the Ephoron leukon, usually called the white fly of Passaick river (order Neuroptera). T. v. 5, no. 8, p. 71–3. Rd Feb. 1.

Wistar, C[aspar]. A description of the bones deposited by the President [Jefferson] in the museum of the Society. . . . T. v. 4, no. 76, p. 526–31, 2 pl. Rd [Mar. 1].
See Jefferson's paper rd Mar. 10, 1797, above.

Bull, Colonel, and Barton, B. S. Note concerning a vegetable found under ground in a letter from Colonel Bull to . . . T. v. 5, no. 19, p. 160–61. Rd Nov. 21.

Turner, George. Remarks on certain articles found in an Indian tumulus at Cincinnati, and now deposited in the Museum of the Society. . . . T. v. 5, no. 9, p. 74–6. Rd Dec. 6.
Written Nov. 25, 1799.

1800 Barton, [B. S.]. Sketch of a geographical view of the trees and shrubs of N[orth] America. P. v. 22, appx. p. 294. Rd Feb. 7.

Latrobe, B. H. A drawing and description of the Clupea tyrannus and Oniscus praegustator. T. v. 5, no. 10, p. 77–81, 1 pl. Rd Feb. 7.

Nemours, Dupont de. Sur les vegetaux, les polypus et les insectes. T. v. 5, no. 14, p. 104–16. Rd June 20.

1801 BARTON, [B. S.]. New species of Vallisneria growing near Philadelphia, called . . . V. Americana, with a drawing. . . . P. v. 22, appx. p. 309. Rd Feb. 6.

LIVINGSTON, [R. R.]. Teeth of some extinct animal found in New York, with description in a letter to Jefferson. P. v. 22, appx. p. 312. Rd May 22.

PEALE, [C. W.]. Verbal account of his late expedition to the state of New York in search of large bones., etc. P. v. 22, appx. p. 316. Rd Oct. 16.

DUNBAR, William. Extracts from a letter to Thomas Jefferson [relating to fossil bones found in Louisiana, and to lunar rainbows . . .]. T. v. 6, pt. 1, no. 8, p. 40–2. Rd Dec. 18.

Written from Natchez, Aug. 22, 1801.

1802 ANTES, [Frederick]. On the hybernation of swallows. . . . T. v. 6, pt. 1, no. 12, p. 59–60. Rd May 7.

Written at Philadelphia, July 9, 1801.

BARTON, [B. S.]. On Willdenow's Bartonia. P. v. 22, appx. p. 323. Rd May 7.

BROWN, John. . . . Cranium of a bison ? found by Uriah Hardesty in the bed of a creek six miles below Licking Creek mouth, two or three miles from the Ohio River, and twelve or fourteen north of Big Bone . . . in a letter . . . on condition that it remain in the same room with the Mammoth. P. v. 22, appx. p. 325. Rd June 18.

BARTRAM, [William]. First attempt to describe our native vines. P. v. 22, appx. p. 328. [Rd Nov. 19.]

ELLIS, John. Account of a method of preventing the premature decay of peach trees. T. v. 5, appx. no. 1, p. [325]–26.

COULTER, Thomas. Description of a method of cultivating peach trees, with a view to prevent their premature decay; confirmed by the experience of forty-five years, in Delaware state, and the western parts of the state of Pennsylvania. T. v. 5, appx. no. 2, p. 327–28.

1803 WATKINS, John. Notices of the natural history of the northerly parts of Louisiana. . . . T. v. 6, pt. 1, no. 14, p. 69–72. Rd Jan. 21.

Written at St. Louis, Oct. 20, 1802.

See also P. v. 22, appx., p. 328. Rd Nov. 19, 1802.

LATROBE, B. H. On two species of Sphex, inhabiting Virginia and Pennsylvania and probably extending through the United States. T. v. 6, pt. 1, no. 15, p. 73–8, 1 pl. Rd Jan. 21.

BARTON, [B. S.]. Memorandum concerning a new vegetable Muscipula. T. v. 6, pt. 1, no. 16, p. 79–82. Rd Feb. 18.

DURALDE, Martin. Abstract of a communication relative to fossil bones, etc., of the country of Apelousas west of the Mississippi . . . to William Dunbar . . . T. v. 6, pt. 1, no. 10, p. 55–8. Rd Mar. 4.

Written April 24, 1802.

BARTON, [B. S.]. Some account of a new species of North American lizard. T. v. 6, pt. 1, no. 22, p. 108–12, illus. Rd April 15.
[Lacerta subviolacea].

DRAYTON, [John]. Destruction of Carolina pine trees, by an insect . . . in a letter to Barton . . . P. v. 22, appx. p. 342. Rd Oct. 7.

PRIESTLEY, J[oseph]. Observations and experiments relating to equivocal, or spontaneous generation. T. v. 6, pt. 1, no. 24, p. 119–29. Rd Nov. 18.

BARTON, B. S. Supplement to the account of the Dipus . . . Americanus . . . T. v. 6, pt. 1, no. 27, p. 143–44. Rd Dec. 16.
Previous part rd Oct. 2, 1795 (q. v. above).

1804 LEWIS, [M.]. Observations on some fossil bones, in a letter to Jefferson. P. v. 22, appx. p. 350, 351. Rd April 6.

WILLIAMSON, [Hugh]. On the fascination of serpents. P. v. 22, appx. p. 350. Rd April 6.

DUNBAR, William. Description of the river Mississippi and its delta, with that of the adjacent parts of Louisiana . . . T. v. 6, pt. 1, no. 30, p. 165–87; & pt. 2, no. 32, p. 191–201. Rd April 6 & Oct. 5.
See also DUNBAR'S Exped. to Louisiana (1804).

PINCKNEY, C. C. On the worm supposed to destroy the South Carolina pines. P. v. 22, appx. p. 362. Rd Oct. 5.

HECKEWELDER, John. Facts and observations relative to the beaver of North America. . . . T. v. 6, pt. 2, no. 35, p. 209–12. Rd Nov. 16.

1805 BROWN, S[amuel]. Two nodules abundant in Green River county, [Ky.]. P. v. 22, appx. p. 374. Rd May 3.

HILL, Ez. Description of the falls of Niagara. P. v. 22, appx. p. 379, 385. Rd Nov. 1.

LEWIS, Meriwether. A box of plants, earths and mineral from . . . per Jefferson, who wishes the seeds sent to Mr William Hamilton. . . . P. v. 22, appx. p. 379. Rd Nov. 15.
See Lewis & Clark Exped. (1804).

VAUGHAN, [John]. Catalogue of Captain Lewis's donations. . . . P. v. 22, appx. p. 380. Rd Dec. 20.
See also Lewis & Clark Exped. (1804).

MITCHILL, [S. L.]. On the ice islands. . . . P. v. 22, appx. p. 380. Rd Dec. 20.

1806 BROWN, Samuel. A description of a cave on Crooked creek, with remarks and observations on nitre and gunpowder. T. v. 6, pt. 2, no. 39, p. 235–47. Rd Feb. 7.

FOTHERGILL, [Anthony]. On ice islands. . . . P. v. 22, appx. p. 382–83, 385, 388–89. Rd Feb. 7.

1807 WILLIAMS, Jon[athon]. Petrifactions on the falls of the Ohio, near Louisville, in a letter to Dr Mease. P. v. 22, appx. p. 393. Rd Jan. 16.

Stewart, J. Head of Arctomys (Maryland marmot) found in Green Briar County, Virginia, sent . . . per Jefferson. P. v. 22, appx. p. 393. Rd Feb. 6.

Latrobe, B. H. An account of the freestone quarries on the Potomac and Rappahannoc Rivers. T. v. 6, pt. 2, no. 46, p. 283–93. Rd [Feb. 20].

Godon, [Silvain]. Observations to serve for the mineralogical map of the state of Maryland. T. v. 6, pt. 2, no. 50, p. 319–23. Rd Nov. 6.

See also Merrill, (1), p. 214. (Annot. Bib.) & his First 100 yrs., Amer. Geol. 1924. p. 22.

Barton, B. S. Function of absorption in certain Amphibia. P. v. 22, appx. p. 402. Rd Dec. 18.

1808 Silliman, Benjamin, and Kingsley, J. L. Memoir on the origin and composition of the meteoric stones which fell from the atmosphere in the county of Fairfield in the state of Connecticut, on the 14th of December, 1807. T. v. 6, pt. 2, no. 51, p. 323–45. Rd Mar. 4.

First pub. in "Conn. Herald." This is a revised & enlarged account, appearing also in Conn. Acad. A. & Sc. (1799). In its Mem. v. 1, no. 1, p. 141–61. 1810 (Written Feb. 18 & 22, 1808). Also appeared earlier in Phila. Med. & Phys. Jour. (1804). v. 3, pt. 1, art. 7, p. 39–57. Mar. 1808. Rev. in Amer. J. Sc. (1818), ser. 2, v. 47, p. 1–8. Jan. 1869. An analysis by Warden, D. B., is in Amer. Med. & Phil. Register (1810). v. 3, no. 4, art. 2, p. 413–16. Apr. 1813; and also in Med. Repos. (1797), v. 14, no. 1, p. 194–96. July, 1810.

Darlington, [William]. Letter on the migration of the Hirundo rustica. P. v. 22, appx. p. 409. Rd Oct. 7.

Barton, R. P. Natural history of Tennessee . . . in extracts from a letter. . . . P. v. 22, appx. p. 411. Rd Dec. 16.

1809 Maclure, William. Observations on the geology of the United States, explanatory of a geological map. T. v. 6, pt. 2, no. 62, p. 411–28, col. map. Rd Jan. 20.

Repr. in Jour. de Physique. v. 69, p. 204–13. 1809 & v. 72, p. 137–65. 1811.

See also his paper below, rd May 16, 1817, which is a revised and enlarged account.

Merrill says: "With the exception of Guthard's mineralogical map of Louisiana and Canada, published in 1752, it was the earliest attempt at a geological map of America." See Merrill, (1), p. 217–21, 227–28. (Annot. Bib.) & his First 100 yrs Amer. Geol. 1924. p. 31–7, port.

Wistar, Caspar. An account of two heads found in the morass called the Big Bone Lick, and presented to the Society by Mr Jefferson. T. n. s. v. 1, no. 31, p. [375–80], 2 pl. [10 fig.] Rd Feb. 3.

Heads collected by Gen. William Clarke. Wistar's "Osseous fragment from Big Bone Lick . . ." Rd Feb. 16, 1816.

1810 WARDEN, D. B. Description and analysis of the meteoric stone which fell at Weston, Connecticut, December 4, 1807. P. v. 22, appx. p. 423. Rd June 15.

See paper by Silliman & Kingsley, rd Mar. 4, 1808, above.

1811 BARTON, B. S. Notes on the generation of fishes. P. v. 22, appx. p. 427. Rd Feb. 15.

1812 MONTGOMERY, Alex[ander]. Letter . . . describing the earthquakes that had occurred at Frankford (!), Ky. P. v. 22, appx. p. 434. Rd Mar. 20.

W[ILLIAMS], J[onathan]. Observations on Phalaeana tinea, etc., the beehive insect, with additional observations by Dr. Barton. P. v. 22, appx. p. 437, 439. Rd Dec. 4.

1813 BRACKENRIDGE, H. H. On the population and tumuli of the aborigines of North America in a letter to Thomas Jefferson. T. n. s. v. 1, no. 7, p. 151–59. Rd Oct. 2.

1814 BRETTON, Fred[erick] de. Observations on the irritability and contractibility of nervous matter. P. v. 22, appx. p. 447. Rd June 17.

WISTAR, C[aspar]. Observations on those processes of the ethmoid bone which originally form the sphenoidal sinuses. T. n. s. v. 1, no. 30, p. [371]–74, [3. fig.] Rd Nov. 4.

1815 CORREA DE SERRA, J[oseph]. Observations and conjectures on the formation and nature of the soil of Kentucky. T. n. s. v. 1, no. 11, p. [174]–80. Rd April 21.

BARTON, B. S. On the genus Bartonia. P. v. 22, appx. p. 459. Rd Dec. 15.

1816 GILMER, F. W. On the geological formation of the natural bridge of Virginia. T. n. s. v. 1, no. 13, p. [187]–92. Rd Feb. 16.

See MERRILL, (1), p. 224. (Annot. Bib.) & his First 100 yrs Amer. Geol. 1924. p. 41.

COOPER, Thomas. [Description] and analysis of the blue iron earth of New Jersey. T. n. s. v. 1, no. 14, p. [193]–99. Rd May 3.

COLLIN, [Nicholas]. On the natural history of the rattlesnake and horned snake. P. v. 22, p. appx. p. 467. Rd Nov. 1.

1817 STEINHAUER, Henry. On fossil reliquia of unknown vegetables in the coal strata. T. n. s. v. 1, no. 1, no. 18, p. [265]–97, 4 pl. [19 fig.] Rd [May 2.]

MACLURE, William. Observations on the geology of the United States of North America; with remarks on the probable effects that may be produced by the decomposition of the different classes of rocks on the nature and fertility of soils; applied to the different states of the Union agreeably to the accompanying map. T. n. s. v. 1, no. 1, p. [1]–91, 1 col. pl. 1 col. map. Rd May 16.

See his paper rd Jan. 20, 1809, which was a preliminary study. See MERRILL, (1), p. 217–21, 227–28 & his First 100 yrs Amer. Geol. 1924. p. 31–7, 46–7. Also appeared as a separate. Phil. 1817. 128 p.

Rev. by Rafinesque in Amer. Monthly Mag. & Critical Rev. (1817), v. 3, p. 41–4. May, 1818.

This paper was of such great importance in the history of American geology, that an analysis of its contents is given below:

Contents:

Preliminary observations; p. 1–6.

sect. 1 General remarks on the method of pursuing geological researches, with a few observations on the different chains of European mountains, compared with those of the United States of America; p. 8–19.

2 Observations on the geology of the United States of America in explanation of the geological map. p. 19–42.

3 Hints on the decomposition of rocks, with an inquiry into the probable effects they may produce on the nature and fertility of soils. p. 43–62.

4 The probable effects which the decomposition of the various classes of rocks may have on the nature and fertility of the soils of the different states of North America, in reference to the accompanying geological map. p. 62–90.

1817 Le Sueur, C. A. Descriptions of several species of chondropterigious fishes of North America, with their varieties. T. n. s. v. 1, no. 33, p. [383]–94, 1 pl. Rd Oct. 17.

Drake, Daniel. Geological account of the valley of the Ohio. T. n. s. v. 2, no. 4, p. [124]–39, 1 pl. Rd Nov. 7.

Date read is 1817, not 1818 as given in T.

Chambers, Geo[rge]. On fossil shells found near Chambersburg, Pa. P. v. 22, appx. p. 475. Rd Nov. 21.

Say, Thomas. A monograph of North American insects, of the genus Cicindela. T. n. s. v. 1, no. 35, p. [401]–26, 1 pl. [7 fig.] Rd Nov. 7.

1818 Steel, Hugh. Geological speculations on the . . . western . . . United States. . . . P. v. 22, appx. p. 482. Rd June 19.

1819 Baldwin, William. An account of two North American species of Cyperus, discovered in the state of Georgia to which is added four species of Kyllingia found on the Brazilian coast, and on the Rio de la Plata in South America. T. n. s. v. 2, no. 7, p. [167]–71. Rd April 16.

Say, Thomas. Descriptions of insects of the families of Carabici and Hydrocanthari of Latreille, inhabiting North America. T. n. s. v. 2, no. 1, p. [1]–109. Rd Aug. 26.

1820 Hentz, N. M. Some observations on the anatomy and physiology of the alligator of North America, Lacerta alligator, Gmel. Crocodilus Lucius, Cuvier. T. n. s. v. 2, no. 10, p. [216]–28, 1 pl. [3 fig.] Rd July 21.

Gibson, J. B. Observations on the trap rocks of the Connewago Hills near Middletown, Dauphin County, and of the Stony Ridge near Carlisle, Cumberland County, Pennsylvania. T. n. s. v. 2, no. 6, p. [156]–66. Rd Nov. 17.

See Merrill, (1), p. 254–55. (Annot. Bib.) & his First 100 yrs Amer. Geol. 1924. p. 80.

1821 James, E. P. (!), [Edwin]. Catalogue of plants collected during a journey to and from the Rocky Mountains, during the summer of 1820 by . . . attached [to Long's Exploring Expedition, 1819]. . . . T. n. s. v. 2, no. 8, p. [172]–90. Rd [Aug. 17.]

See also Long Explor. Exped. to Rockies (1819)

————. Remarks on the sandstone and floetz trap formations of the western part of the valley of the Mississippi by . . . attached to Long's Exploring Expedition . . . T. n. s. v. 2, no. 9, p. [191]–215. Rd Aug. 17.

Written from Smithland, Ky., April 21, 1821.

See also Long Explor. Exped. to Rockies (1819)

1822 Seybert, H[enry]. Analysis of the Maclurite or fluosilicate of magnesia, from New Jersey. P. v. 22, appx. p. 512. Rd May 17.

1823 Troost, G[erard]. Description and chemical analysis of the retinasphalt, discovered at Cape Sable, Magothy River, Ann Arundel County, Maryland. T. n. s. v. 2, no. 2, p. [110]–15. Rd Dec. 19.

1824 Seybert, Henry. Analysis of the Chrysoberyls from Haddam and Brazil. T. n. s. v. 2, no. 3, p. [116]–23. Rd Mar. 5.

Troost, Gerard. Notice of a new crystalline form of the yenite of Rhode Island. T. n. s. v. 2, no. 16, p. [478]–80. Rd Oct. 15.

1825 Harlan, [Richard]. Some observations on some of the mammiferous animals of N[orth] America, being part of a work which he is preparing for the press on that subject. P. v. 22, appx. p. 540. Rd Mar. 18.

————. A notice of an extinct fossil Tapir; of a new species of Lepus; of a new genus (Osteopera) of the order Glires. P. v. 22, appx. p. 541. Rd April 1.

Izard, Geo[rge]. Letter . . . that he would take pleasure in promoting the objects of the Society by collecting such information respecting the aborigines and the natural history of Arkansas as his situation of governor of that territory would permit. . . . P. v. 22, appx. p. 541. Rd April 15.

1826 Collin, Nicholas. Remarks on some birds, quadrupeds and phenomena of nature. P. v. 22, appx. p. 550. Rd Feb. 17.

1827 Poinsett, J. R. [Letter] . . . on a cypress tree, of immense size, growing near the city of Oaxaca, Mexico . . . now in Mexico with a cord . . . feet long representing its circumference. P. v. 22, appx. p. 567. Rd June 15.

Pickering, C[harles]. On the geographical distribution of plants. T. n. s. v. 3, no. 5, p. [274]–84, map. Rd Oct. 19.

Hentz, N. H. Description of eleven new species of North American insects. T. n. s. v. 3, no. 3, p. [253]–58, 1 col. pl. [11] fig. Rd Nov. 2.

Lea, Isaac. Description of six new species of the genus Unio, embracing the anatomy of the oviduct of one of them, together with some anatomical observations on the genus. T. n. s. v. 3, no. 4, p. [259]–73, 4 col. pl. [20 fig.] Rd Nov. 2.

Meigs, C. D. An account of some human bones found on the coast of Brazil, near Santas, latitude 24° 30″ S, longitude 46° W. T. n. s. v. 3, no. 6, p. [285]–91. Rd Dec. 7.

1828 Harlan, Richard. On a marine animal discovered in the alluvion of the Mississippi, near to its mouth, now exhibiting in Baltimore (verbal communication). . . . P. v. 22, appx. p. 575. Rd Jan. 18.

————. Stated that Wm. H. Todd had lately put into his hands, for examination, a fossil clavicle, and part of the sternum of the Megatherium, which Mr T. had discovered in a marl pit, at his plantation in the state of New Jersey. P. v. 22, appx. p. 576. Rd Feb. 1.

Ord, George. Some observations on the moulting of birds. T. n. s. v. 3, no. 7, p. [292]–99. Rd Mar. 7.

Harlan, Richard. Experiments made on the poison of the rattlesnake, in which the powers of the Hieraceum venosum, as a specific, were tested; together with some anatomical observations on this animal . . . T. n. s. v. 3, no. 8 & 12, p. 300–14, 400–2. Rd Mar. 7, 1828, and Mar. 20, 1829.

Bonaparte, C. L. General observations on the birds of the genus Tetrao; with a synopsis of the species hitherto known. T. n. s. v. 3, no. 10, p. [383]–94. Rd June 20.

Kane, J. K. Minerals and vegetable remains from the deep cut of the Chesapeake and Delaware Canal. P. v. 22, appx. p. 582. Rd July 18.

Hentz, N. M. Remarks on the use of the maxillae in coleopterous insects, with an account of two species of the family Telephoridae, and of three of the family Mordellidae, which ought to be the type of two distinct genera. T. n. s. v. 3, no. 14, p. 458–63, 1 pl. [3 fig.] Rd Sept. 19.

Pederson. Several specimens of the siliceous deposits from the great spring of geyser in Iceland. P. v. 22, appx. p. 587. Rd Dec. 5.

1829 Lea, Isaac. Description of a new genus of the family of Naïades, including eight species, four of which are new; also the description of eleven new species of the genus Unio from the rivers of the United States; with observations on some of the characters of the Naïades. T. n. s. v. 3, no. 13, p. 403–57, 8 col. pl. [24 fig.] Rd Mar. 6.

Nicklin, P. H. Conchological observations on Lamarck's family of Naïades. T. n. s. v. 3, no. 11, p. [395]–99. Rd Mar. 6.

Harlan, Richard. Description of a new species of the genus, Astacus. T. n. s. v. 3, no. 15, p. [464]–65. Rd Apr. 3.

————. Notice of an anatomical peculiarity observed in the structure of the condor of the Andes (Vultur gryphus, Linn.). T. n. s. v. 3, no. 16, p. [466]. Rd Apr. 3.

LIVERMORE, Daniel, and DEXTER, A. A. Memoir and profile of the geological strata developed in the progress of the deep cut of the Delaware and Chesapeake Canal. P. v. 22, appx. p. 594. Rd July 17.

HAYS, Isaac. Description of a fragment of the head of a new fossil animal, discovered in a marl pit, near Moorestown, N. J. T. n. s. v. 3, no. 18, p. 471–77, 1 pl. [11 fig.] Rd Dec. 4, 1829 & Jan. 1, 1830.

1830 GODMAN, J. D. Description of a new genus and new species of extinct mammiferous quadruped. T. n. s. v. 3, no. 19, p. 478–85, 2 pl. [15 fig.] Rd Jan. 1.

See also his paper in Monthly Amer. Jour. Geol. & Nat. Sc. (1831), v. 1, no. 3, p. 140–44. Sept. 1831. From information by R. Dunglison.

LEA, Isaac. Observations on the Naïades, and descriptions of new species of that and other families. T. n. s. v. 4, art. 5, p. 63–121, 16 pl. [47 fig.] Rd May 7.

Continuation rd Mar. 16, 1832.

NUTTALL, Thomas. Description of a new species of Sarracenia. T. n. s. v. 4, art. 2, p. 49–51, 1 pl. Rd May 7.

FEUCHTWANGER, Lewis. . . . On a mineral subject. . . . P. v. 22, appx. p. 602, 603. Rd June 18.

GRANT, J. P. Donation of minerals from the Missouri lead regions—with a description. P. v. 22, appx. p. 603. Rd Aug. 20.

HARLAN, Richard. Poisoning vegetables with their own poison. . . . P. v. 22, appx. p. 604. Rd Oct. 1.

———. Description of a species of Orang, from the northeastern province of British East India, lately the kingdom of Assam. T. n. s. v. 4, art. 3, p. 52–9, 1 pl. Rd Nov. 19.

1831 LEA, Isaac. Description of a new genus of the family Melaniana of Lamarck. T. n. s. v. 4, art. 6, p. 122–23, illus. Rd Jan. 7.

POINSETT, J. R., and KEATING, [W. H.]. . . . A catalogue of the Mexican animals and antiquities—presented by . . . J. R. Poinsett. P. v. 22, appx. p. 616. Rd May 6.

SCHWEINITZ, L. D. de. Synopsis Fungorum in America Boreali media degentium. . . . T. n. s. v. 4, art. 8, p. 141–316, 1 pl. [6 fig.] Rd April 15.

On p. 309–11 appears the list of the species first discovered in America by himself.

See also ARTHUR, J. C., and BISBY, G. R. An annotated translation of the part of Schweinitz's two papers giving the rusts of N. A. (In Amer. Phil. Soc. Proc. 1918. v. 57, p. 173–292.) Rd April 13, 1917.

HAYS, Isaac. Descriptions of the specimens of inferior maxillary bones of mastodons in the cabinet of the American Philosophical Society with remarks on the genus Tetracaulodon (Godman), etc. T. n. s. v. 4, art. 9, p. 317–39, 10 pl. Rd May 20.

Appx, p. 336–39, dated Dec. 2, 1831.

1832 Harlan, [Richard]. Description of a new species of fresh-water tortoise from India. P. v. 22, appx. p. 624. Rd Mar. 2.

Lea, Isaac. Observations on the Naïades, and description of new species of that, and other families. T. n. s. v. 5, art. 2, p. 23–119, 19 col. pl. [86 fig.] Rd Mar. 16 & seq.
p. 23– 59 rd Mar. 16, 1832
p. 59– 94 (1st suppl.) rd Mar. 15, 1833
p. 95–113 (2d suppl.) rd Feb. 7, 1834
p. 114– 17 rd April, 18, 1834
See his paper rd May 7, 1830 (above)

Harlan, Richard, and [Bry, H]. Notice of fossil bones found in the tertiary formation of the state of Louisiana. T. n. s. v. 4, art. 12, p. 397–403. Rd Oct. 19.

Harlan, Richard. Notice of the discovery of the remains of the Ichthyosaurus in Missouri. T. n. s. v. 4, art. 13, p. 405–8 + [2 p.], 1 pl. [8 fig.] Rd Oct. 19.

Say, Thomas. Descriptions of new North American insects and observations on some already mentioned. T. n. s. v. 4, art. 14, 409–70. Rd Nov. 2.
Also in Repr. of S's Ent. Writings. 1859 & 1891. v. 2, p. 521–86.
Continuation rd June 17, 1836 (q.v. below)

Hopkinson, J. P., and Pancoast, J. On the visceral anatomy of the Python (Cuvier) described by Daudin as the Boa reticulata. T. n. s. v. 5, art. 3, p. [121]–34, 1 pl. Rd Nov. 2.

1833 Rio, Andres del. On the crystals developed in Vermiculite by heat. T. n. s. v. 5, art. 5, p. [137]–38. Rd Nov. 1.

Lea, Isaac. On the tufaceous lacustrine formation of Syracuse; on six new species of fossil shells from the Tertiary of Maryland and New Jersey; on a new genus of the family Spherulacea from the Cretaceous deposits of Timber Creek in New Jersey. P. v. 22, appx. p. 641. Rd Nov. 1.
In his "Contributions to geology." Phila. 1833. 227 p.

1834 Nuttall, Thomas. Collections towards a flora of the territory of Arkansas. T. n. s. v. 5, art. 6, p. 139–203. Rd April 4.

Lea, Isaac. Description of new freshwater and land shells. T. n. s. v. 6, art. 1, p. 1–[154], 24 col. pl. [116 fig.] Rd between Dec. 19, 1834 & Jan. 19, 1838.
p. 1– 18 rd Dec. 19, 1834
19– 20 Jan. 2, 1835
21– 2 Sept. 18,
23– 48 Feb. 5, 1836
48– 69 July 15,
69– 72 Aug. 19,
73– 94 Nov. 4,
95–102 July 21, 1837
103– 8 Jan. 5, 1838
108– 9 Jan. 19,

1835 Rogers, W. B., and Rogers, H. D. Contributions to the geology of the Tertiary formations of Virginia. T. n. s. v. 5, art. 14, p. [319]–41. Rd May 5.

Continuation rd Mar. 1, 1839 (q.v. below)

Repr. in (Rogers, W. B. Reprint of . . . reports . . . Virginia. N. Y. 1884. p. 661–73)

1836 Say, Thomas. Descriptions of new North American insects and observations on some already described. T. n. s. v. 6, art. 2, p. 155–90. Rd June 17.

Previous part rd Nov. 2, 1832 (q.v. above)

Also in Repr. of Say's Entomological Writings. Phila. 1859 & 1891, v. 2, p. 587–629.

Taylor, R. C., and Clemson, T. C. Notice of a view of bituminous coal, recently explored in the vicinity of the Havana, in the island of Cuba. T. n. s. v. 6, art. 3, p. 191–96, 1 pl. Rd Aug. 19.

1837 Gibson, [J. B.] On the consubstantiality of the limestone of the valley of the Mississippi. . . . P. v. 22, appx. p. 699. Rd Feb. 3.

Bachman, John. Observations on the changes of colour in birds and quadrupeds. T. n. s. v. 6, art. 4, p. [197]–239. Rd May 19.

Abert, [J. W.] On mocking birds. P. v. 22, appx. p. 705. Rd Aug. 18.

1839 Rogers, W. B., and Rogers, H. D. Contributions to the Tertiary formations of Virginia: second series, being a description of several species of Meiocene and Eocene shells, not before described. T. n. s. v. 6, art. 13 & 14, p. 347–70; 371–77, 5 pl. [16 fig.] Rd March 1.

Previous part rd May 5, 1835 (q.v. above)

Abstract in P. v. 1, no. 7, p. 88–90. Aug. 1839. Repr. in (Rogers, W. B. Reprint of . . . reports . . . Virginia. N. Y. 1884. p. 661–73)

1840 Lea, Isaac. Description of nineteen new species of Colimacea. T. n. s. v. 7, art. 21, p. [455]–65, 2 pl. [19 fig.] Rd Feb. 21.

Abstract in P. v. 1, no. 10, p. 173–75. Feb. 1840.

————. On the Patella amaena of Say. T. n. s. v. 7, art. 8, p. [73]–4. Rd Mar. 6.

Abstract in P. v. 1, p. 187. Apr. 1840

Dunglison, [Robley]. . . . A curious but not unique case of a worm in the eye of a horse now in Baltimore. P. v. 1, no. 11, p. 200–1. Rd Apr. 17.

Lea, Isaac. Notice of the oolitic formation in America, with descriptions of some of its organic remains. T. n. s. v. 7, art. 16, p. 251–60, 3 pl. [14 fig.] Rd May 15.

Abstract in P. v. 1, no. 12, p. 225–27. July, 1840.

Ord, [George]. . . . On the following passage in Audubon's "Birds of America" article, "Small fly-catcher." P. v. 1, no. 13, p. 272–73. Rd Sept. 18.

Horner, W. E., and Hays, Isaac. Description of an entire head and various other bones of the Mastodon discovered one mile east of Bucyrus, Crawford Co., Ohio. T. n. s. v. 8, art. 2, p. 37–48, 4 pl. Rd Oct. 2.
Note by Hays, p. 47–8, rd May 21, 1841.

Morris, (Miss) M. H. On the Cecidomyia destructor, or Hessian fly. T. n. s. v. 8, art. 3, p. 49–51. Rd Oct. 2.
Abstract in P. v. 1, no. 14, p. 318–19. Dec. 1840.

Horner, W. E. Note of the remains of the Mastodon, and some other extinct animals, collected together in St. Louis, Missouri. . . . P. v. 1, no. 13, p. 279–82. Rd Oct. 2.

Nuttall, Thomas. Descriptions of new species and genera of plants in the natural order of the Compositae, collected in a tour across the continent to the Pacific, a residence in Oregon, and a visit to the Sandwich Islands and Upper California, during the years 1834 and 1835. T. n. s. v. 7, art. 20, p. 283–453. Rd Oct. 2.

Horner, W. E. Remarks on the dental system of the Mastodon, with an account of some lower jaws in Mr Koch's collection, St. Louis, Mo., where there is a solitary tusk on the right side. T. n. s. v. 8, art. 4, p. 53–9. Rd Nov. 6.
Abstract in P. v. 1, no. 14, p. 307–8. Dec. 1840. A correction in P. v. 2, no. 15, p. 6–7. Jan. 1841.

1841 Rogers, H. D. Some observations on the geological structure of Berkshire, Mass., and the neighboring parts of New York. . . . P. v. 2, no. 15, p. 3–4. Rd Jan. 1.

Lea, Isaac. Description of new freshwater and land shells (cont.) T. n. s. v. 8, art. 12, p. [163]–250 [+2 p.] 23 pl. [65 fig.] Rd Jan. 15.
Previous part rd Dec. 19, 1834 (q.v. above)
Continuation rd Feb. 19, 1841 (see next entry)
Abstract in P. v. 1, no. 13, p. 284–89. Oct. 1840.
Most of the specimens collected in Tennessee by Currey, A. O., and Edgar, S. M. See Tenn. Geol. Surv. (1831)
p. 163– 90 rd Jan. 15, 1841
p. 190– 91 rd Dec. 21, 1838
p. 191–229 rd Oct. 2, 1840
p. 230– 41 rd Feb. 19, 1841
p. 242– 45 rd June 18, 1841
p. 246– 49 rd Oct. 21, 1842

———. Description of new freshwater and land shells (cont.). T. n. s. v. 9, art. 1, p. 1–31. Rd Feb. 19, 1841 & Dec. 16, 1842.
First paper in this ser. rd Dec. 19, 1834 (q.v.)
See paper in preceding entry.
p. 1–17, rd Feb. 19, 1841; p. 17–23, rd June 18, 1841 & p. 24–30, rd Dec. 16, 1842.

Coates, [B. H]. . . . The history of the larva of the Hessian fly. P. v. 2, no. 17, p. 42–3. Rd April 2.

Boyé, [M. H.] . . . The results of the analysis of three different varieties of felspar from the primary rocks of the state of Delaware, as performed by Prof. Booth and himself. P. v. 2, no. 18, p. 53–6. Rd May 7.

See also Delaware Geol. Surv. (1837)

Coates, B. H. Oral communication in relation to the Hessian fly. P. v. 2, no. 19, p. 96–7. Rd Sept. 17.

See also P. v. 2, p. 224–25, 237, 241–43. 1841–42.

Hays, [Isaac]. . . . A very extensive and highly interesting collection of fossil bones, chiefly of the Mastodon, recently brought to the city by Mr Albert Koch of St. Louis. P. v. 2, no. 19, p. 102–3. Rd Oct. 1.

Harlan, R[ichard]. Description of the bones of a nondescript animal, of the order Edentata, allied to the Megatherium, Megalonyx, Clamyphorus, Orycteropus, etc. P. v. 2, no. 19, p. 105, 109–11. Rd Oct. 15.

Permission received by Harlan to withdraw the paper, and it was pub. in the Amer. J. Sc. (1818), v. 44, p. 69–80, 3 pl. Jan. 1843; & v. 45, p. 208–11. July, 1843. The last citation contains his Remarks on Mr Richard Owen's letter concerning the article.

Nuttall, Thomas. Description and notices of new or rare plants in the natural orders Lobeliaceae, Campanulaceae, Vaccinieae, Ericaceae, collected in a journey over the continent of North America and during a visit to the Sandwich Islands and Upper California. T. n. s. v. 8, art. 13, p. 251–72. Rd Dec. 3.

See note by E. L. Greene in ERYTHEA. v. 3, p. 177–78. 1895.

Rogers, W. B., and Rogers, H. D. Observations on the geology of the western peninsula of upper Canada, and the western part of Ohio. T. n. s. v. 8, art. 14, p. 273–84. Rd Dec. 3.

Abstract in P. v. 2, no. 20, p. 120–25. Dec. 1841.

1842 Hays, Isaac. . . . Abstract of . . . paper read by Prof. Owen to the Geological Society of London, relative to Mr Koch's collection of Mammalian remains. P. v. 2, no. 22, p. 183–84. Rd May 6.

Lea, [Isaac]. Exhibited specimens of rock masses, brought by Lieut. Rich of the U. S. Navy, from Payta in Peru, and from the Bay of Coquimbo in Chili. P. v. 2, no. 23, p. 213. Rd Sept. 16.

————. . . . Two specimens of coal, taken from the large anthracite coal bed in the Pine grove district. P. v. 2, no. 23, p. 229–30. Rd Oct. 21.

Morton, S. G. Observations on Egyptian ethnography, derived from anatomy, history and the monuments. T. n. s. v. 9, art. 3, p. 93–159, illus. 14 pl. (of crania). Rd Dec. 16, 1842, Jan. 6, & Apr. 6, 1843.

Abstracts in P. v. 2, no. 24, p. 239–41. Dec. 1842; & P. v. 3, no. 27, p. 115–18. May, 1843.
Collections made by George R. Gliddon, U. S. consul at Cairo.

1843 Hays, [Isaac]. . . . On the reports of three papers recently read to the Geological Society of London relative to the Mastodonoid animals in the collection of Mr Koch. P. v. 2, no. 26, p. 264–66. Rd April 7.

————. On the family Proboscidae, and their general character and relations, their mode of dentition, and geological distribution. . . . P. v. 3, no. 27, p. 44–8. Rd May 26.

Oral communication at the Society's Centenary celebration May 25–30.

Rogers, H. D., and Rogers, W. B. . . . On the phenomena of the great earthquakes which occurred during the past winter, one in this country and the other in the West Indies, and on the general theory of earthquake motion, by which they proposed to elucidate several points in geological dynamics. P. v. 3, no. 27, p. 64–7. Rd May 26.

At the Centenary celebration.

Redfield, W. C. . . . On tides, and the prevailing currents of the ocean and atmosphere. P. v. 3, no. 27, p. 86–9. Rd May 27.

At the Centenary celebration.

Horne, [W. E.]. Summary view of the existing application of the microscope to human anatomy and to animal organization generally. . . . P. v. 3, no. 27, p. 89–90. Rd May 27.

At the Centenary celebration.

Lea, H. C. Description of some new fossil shells from the Tertiary of Petersburg, Virginia. T. n. s. v. 9, art. 9, p. 229–74, 4 pl. [104 fig.]. Rd May 29.

Read at the Centenary celebration.

Abstract in P. v. 3, no. 27, p. 162–65. May, 1843.

Meigs, C. D. Measurements of the foetal cranium. P. v. 3, no. 27, p. 127–29. Rd May 29.

At the Centenary celebration.

Nicollet, J. N. . . . Exhibited his original map of the Northwestern territory of the United States, made from personal observations, and read an account of his geographical exploration of the sources of the Mississippi. P. v. 3, no. 27, p. 140–42. Rd May 29.

At the Centenary celebration.

See also Nicollet's Explor. of the Mississippi (1836).

Lea, Isaac. On coprolites. P. v. 3, no. 27, p. 143. Rd May 29.

Oral paper at the Centenary celebration.

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1849 Emmons, [Ebenezer]. . . . Extract of a letter . . . describing the geological character of [Albany, N. Y.]. P. v. 5, no. 43, p. 85–6. Rd Apr. 20.

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1852 Taylor, R. C. On a vein of asphaltum at Hillsborough, in Albert County, Province of New Brunswick. P. v. 5, no. 47, p. 241–43. Rd Jan. 16.

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The whole constitutes Reports of progress for the expeditions.

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THE CHARLESTON MUSEUM, CHARLESTON, S. C. (1773)

History

The Charleston Museum, the oldest public museum in the United States was founded at Charleston, South Carolina, by the Charleston Library Society. It outlined its aims and policies in a ''Prospectus'' published in the ''South Carolina Gazette'' (Powell's), for March 22 and April 5 and 12, 1773, and in the ''South Carolina Gazette and Country Journal'' of March 30 and April 6, 1773, as follows:

THE LIBRARY SOCIETY OF CHARLES-TOWN

Taking into their consideration, the many Advantages and great credit that would result to this Province, from a full and accurate Natural History of the same, and being desirous of promoting so useful a design, have appointed a Committee of their number to collect and prepare Materials for that purpose.

That this may be done in the most complete and extensive manner, they do now invite every Gentleman who wishes well to the Undertaking, expecially those who reside in the Country, to co-operate with them in the Advancement of this Plan. . . . For this Purpose, the Society would request such Gentlemen to procure and send to them, all the natural Productions, either Animal, Vegetable, or Mineral, that can be had in their several Bounds, with Accounts of the various Soils, Rivers, Waters, Springs, etc., and the most remarkable Appearances of the different Parts of the Country.

Of the Animal Tribe, they would wish to have every Species, whether Terrestrial or Aquatic, viz., Quadrupedes, Birds, Fishes, Reptiles, Insects, Worms, etc., with the best Accounts of their Customs and natural Habitudes.

Of Vegetables, they will thankfully receive every Kind, from the loftiest Tree in the Forest, to the smallest Plant of the Fields. . . . A complete Specimen of any Tree or Plant, will be two small Branches of each, one having the Flower in full Blossom, and the other the ripe Fruit. . . . At the same time the Society beg to be furnished with the best Accounts that can be given of the Uses and Virtues, either in Agriculture, Commerce, or Medicine, of which such Tree or Plant is possessed—the Soil in which it most commonly grows . . . the Season in which it flowers, and when it bears its Fruit.

They would be glad to be furnished also with Specimens of all the various Fossils, Minerals, and Ores, with different Soils, Earths, Clays, Marles, Stones, Sands, Shells, &c., the Production of this Province, with the best Accounts of their several Natures, Qualities, Situations and Uses.

The Society, in order that this Design may be carried into immediate Execution, have fitted up a Museum for the Reception and Preservation of specimens of these several natural Productions, and have appointed Charles Cotesworth Pinckney, and Thomas Heyward, jun., Esquires, with Alexander Baron, and Peter Fayssoux, Physicians, in Charles-Town, to receive them; to whom all Letters of Intelligence, Specimens, &c., are to be addressed.

And they flatter themselves, that the evident Utility of the Plan, will engage such a number of public spirited Gentlemen to assist them, that they will soon be enabled to make a considerable Progress. . . . They will not only gratefully receive all such Communications, and apply them in the best Manner, they can for the above Purposes, but the Names of such shall be recorded as Promoters of, and Contributors to, so useful a Work.

Any Expence that may be incurred by forwarding letters of Intelligence, Specimens, &c., to Town, the Society will chearfully repay."

By order of the Committee,
John Murray, Chairman.

(Reprinted from articles by P. M. Rea in Bibliography: 1915 & 1911, below)

For an Accession-Book belonging to the Museum showing the donations received 1798–1808, see article by Rea, under 1906, in the Bibliography below.

In 1815, the collections and cases of the Museum, in the possession of the Library Society were turned over to the the then recently organized LITERARY & PHILOSOPHICAL SOCIETY OF SOUTH CAROLINA (1813) q. v. When the latter institution failed to procure the necessary appropriations for the erection of a building to house the collections, the Museum was transferred to the jurisdiction of the Medical College of the State of South Carolina in Charleston. In 1850 the Museum was again transferred, this time, to the City of

Charleston, at the suggestion of Louis Agassiz, who was present at the third meeting of the American Association for the Advancement of Science (1848), q. v., held in Charleston, during March, 1850.

On November 25, 1850, F. S. Holmes was appointed Curator of the Museum, and the formal opening occurred early in 1852. During the fifties the Elliott Society of Natural History (1853), q.v., presented to the Museum a large number of specimens. The Museum has remained the property of the city since.

The salient features in the history of the Museum have been abstracted from the historical account by P. M. Rea contained in the article under 1915 in the Bibliography below (q.v.). For the history of the various periods in the development of the Museum, see the entries in the Bibliography below.

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THE AMERICAN ACADEMY OF ARTS AND SCIENCES, BOSTON (1780)

History

"In this commonwealth [Boston] a Society for promoting useful knowledge, was, for many years, in contemplation; but the design was never vigorously engaged in and pursued, till the end of the year 1779, when many gentlemen, persuaded of the utility of such an institution, determined without delay to use their endeavors, to have one formed upon a liberal and extensive plan, and at the same time to have it established upon a firm basis, by obtaining the sanction of the legislature. And to the honor of our political forefathers, be it spoken, that although the country was engaged in a distressing war, a war the most important to the liberties of mankind, that was ever undertaken by any people, and which required the utmost attention of those who were entrusted with our public concerns, they immediately adverted to the usefulness of the design, entered into its spirit, and incorporated a Society, with ample privileges, by the name of the 'American Academy of Arts and Sciences.' The purpose of this institution is to promote most branches of knowledge advantageous to a community, as will appear by the following Charter of Incorporation, which was granted May 4, 1780."

" . . . And be it further enacted by the authority aforesaid, that the end and design of the institution of the said Academy is, to promote and encourage the knowledge of the antiquities of America, and of the natural history of the country, and to determine the uses to which the various natural productions of the country may be applied; to promote and encourage medical discoveries, mathematical disquisitions, philosophical inquiries and experiments . . . and in fine, to cultivate every art and science, which may tend to advance the interest, honor, dignity, and happiness of a free, independent and virtuous people."

"The genius for natural history may have a large range, as the fossil, the vegetable and animal kingdoms in this part of the world, lie before him . . ." Extracts from the MEMOIRS, v. 1 (1785), of the Academy, preface, p. 4–5; 7; 10.

It began the publication of its Memoirs in 1785, which has been continued to this day. It began early the formation of a cabinet or museum of specimens in natural history and other branches of science, and of a library.

During the first sixty-five years of its existence the Academy issued only 5 volumes of Memoirs, having begun a new series in 1833, after a lapse of 12 years. Since 1846 its Memoirs have appeared at rather regular intervals. In 1848 the Academy began the publication of its Proceedings, selected from its Records. (See below—MEMOIRS; PROCEEDINGS: Dates of Publication.)

A list of the presidents of the Academy is given below. Jacob Bigelow and Asa Gray were the only naturalists who held this office, serving from 1846 to 1863, and 1863–1873, respectivley.

Other naturalists holding office in the Academy were:

Corresponding Secretary:

Asa Gray—May 27, 1844–May 27, 1850 & May 25, 1852–May 25, 1863
Augustus Addison Gould—May 28, 1850–May 24, 1852
William Barton Rogers—May 26, 1863–June 7, 1869

Recording Secretary:

George Barrell Emerson—May 26, 1840–May 29, 1843
Augustus Addison Gould—May 30, 1848–May 27, 1850
Samuel Kneeland, Jr.—Nov. 10, 1852–May 29, 1854

Cabinet Keepers:

James Winthrop—Aug. 30, 1780–Jan. 29, 1782
Stephen Sewall—Jan. 30, 1782–May 26, 1783
Caleb Gannett—May 27, 1783–May 23, 1791
John Lathrop—May 24, 1791–May 27, 1805
Allan Pollock—May 28, 1805–May 28, 1810
John Gorham—May 29, 1810–May —, 1823

Below under "Papers on Natural History," is given a list of the scientific papers read before the Academy, on natural history, and published in its Memoirs and its Proceedings, arranged chronologically.

In 1842, the Academy was divided into three classes, of which the second constituted the natural history sciences.

With the formation of the Boston Society of Natural History (1830), q.v., in 1830, there came a diminution of the natural history activities of the Academy; but a greatly renewed interest took place in the fifties and the sixties.

Presidents of the Academy

James Bowdoin	Aug. 30, 1780–May 23, 1791
John Adams	May 24, 1791–May 23, 1814
Edward Augustus Holyoke	May 24, 1814–May 29, 1820
John Quincy Adams	May 30, 1820–May 25, 1829
Nathaniel Bowditch	May 26, 1829–May 28, 1838
James Jackson	May 29, 1838–May 27, 1839
John Pickering	May 28, 1839–May 25, 1846
Jacob Bigelow	May 26, 1846–May 25, 1863
Asa Gray	May 26, 1863–May 26, 1873

Bibliography

1785 AMERICAN ACADEMY OF ARTS AND SCIENCES, Boston. Memoirs. Boston, 1785–date. v. 1–4, (old ser.) & v. 1–date (new ser.). 4°.

v. 2, pt. 1 (1793, bears Charlestown, imprint. v. 2, pt. 2 (1804), has Cambridge, imprint, & is cont. through n. s. v. 2. From n. s. v. 3 to date, (1848–date), imprint bears names of both Cambridge & Boston. For dates of publication, etc., of separate volumes, see below under MEMOIRS: Dates of Publication.

1802 ———. Catalogue of the books in the library of the . . . [Boston, 1802.] 68 p.

1848 ———. Proceedings of the . . . selected from the Records. Boston, & Cambridge, 1848–date. v. 1–date. (May, 1846–date)

For dates of publication, etc., see below under PROCEEDINGS: Dates of Publication.

1882 ———. The centennial celebration of the Academy [May 26, 1880.] Cambridge, 1882. 103 p. 4°. (In its Memoirs. n. s. v. 11, pt. 1)

The proceedings of the celebration, p. [1]–31. Members of the Academy from its foundation, p. 33–63. Officers of the Academy, p. 64–9. Index to names of fellows, p. 71–5. Charter of incorporation and statutes, p. [77]–99. Bequest of Count Rumford, p. [100]–3.

MEMOIRS (M)

Dates of Publication

v. 1, pt. 1,	1785	32 + 20 + p. 1–186.
pt. 2,		p. 187–568.
v. 2, pt. 1,	1793	8 + 200 p.
pt. 2,	1804	[7] + 168 p. pl. charts.
v. 3, pt. 1,	1809	p. 1–212, pl.
pt. 2,	1815	p. 213–544, pl.
v. 4, pt. 1,	1818	4 + 23 + p. 1–223, pl.
pt. 2,	1821	p. [224]–421, pl.
n.s. v. 1,	1833	4 + 31 + 595 p., 8 pl. map.
n.s. v. 2,	1846	76 + 568 p., 6 pl.
n.s. v. 3,	1848	2 + 82 + 290 p. 45 pl.
n.s. v. 4, pt. 1,	1849	p. 1–220, 26 pl.
pt. 2,	1850	2 + p. 221–388, 16 pl.
n.s. v. 5, pt. 1,	1853	2 + p. 1–178, 19 pl. map.
pt. 2,	1855	2 + p. 179–[412] + 15 p., 16 pl. map.
n.s. v. 6, pt. 1,	1857	2 + p. 1–222, map.
pt. 2,	1858	2 + p. [223]–476 + 15 p. 8 pl. map.
n.s. v. 7,	1860	2 + 624 p.
n.s. v. 8, pt. 1,	1861	4 + p. 1–360 + 16 p. 4 pl.
pt. 2,	1863	p. [361]–572 + 16 p., 6 pl.
n.s. v. 9, pt. 1,	1867	2 + p 1–264.
pt. 2,	1873	2 + p. 265–477 + 15 p.

PROCEEDINGS (P)

Dates of Publication

v. 1	for May 26, 1846–April 4, 1848	pub. 1848	346 p.
v. 2	May 30, 1848–May 4, 1852	1852	359 p.
v. 3	May 25, 1852–May 12, 1857	1857	416 p.

v. 4	May 26, 1857–May 8, 1860	1860	457 p.
v. 5	May 29, 1860–May 13, 1862	1862	457 p.
v. 6	May 27, 1862–May 30, 1865	1865	567 p.
v. 7	Aug. 9, 1865–May —, 1868	1868	525 p.

Papers on Natural History

1780 Lincoln, Benjamin. . . . A letter . . . relating to the ingrafting of fruit trees, and the growth of vegetables; inclosing the observations of his friend, on the growth of trees downward after the first year. M. v. 1, pt. 2, art. 23, p. 388–95. Written Nov. 3.

Belknap, Jeremy. An account of large quantities of a fossil substance containing vitriol and sulphur, found at Lebanon in the state of New Hampshire, accompanying a specimen. M. v. 1, pt. 2, art. 17, p. 377. Written Sept. 28.

1782 Whitney, Peter. An account of a singular apple-tree producing fruit of opposite qualities; a part of the same apple being frequently sour, and the other sweet. M. v. 1, pt. 2, art. 22, p. 386–87. Written July 15.

Deane, Samuel. An account of yellow and red pigment, found at Norton, with the process for preparing the yellow for use, accompanied with specimens. . . . M. v. 1, pt. 2, art. 18, p. 378–79. Written May 30.

1783 Webster, Samuel. An account of an oilstone found at Salisbury. M. v. 1, pt. 2, art. 19, p. 380. Written Jan. 24.

Dexter, Samuel. A letter on the retreat of house-swallows in winter. . . . M. v. 1, pt. 2, art. 25, p. 494–96. Written June 3.

Tenney, Samuel. An account of a number of medicinal springs at Saratoga, in the state of New York. . . . M. v. 2, pt. 1, art. 2, p. 43–61. Written Sept. 1.

Jones, Daniel. An account of West-River mountain and the appearance of there having been a volcano in it. . . . M. v. 1, pt. 2, art. 9, p. 312–15. Written Nov. 2.

1784 Cutler, Manasseh. An account of some of the vegetable productions naturally growing in this part of America, botanically arranged. M. v. 1, pt. 2, art. 24, p. 396–493. Com. Jan. 26.

> This was the first description of importance of the indigenous plants of New England.
>
> Repr. in (Lloyd Library, Cincinnati. Bull. no. 7. 1903. 8+p. [395]–493.) Reproduction ser. no. 4, incl. Biography & portrait.

Williams, [Samuel]. Observations and conjectures on earthquakes of New England. M. v. 1, pt. 2, art. 8, p. 260–311.

Alexander, Caleb. An account of eruptions, and the present appearances in West-River Mountain. . . . M. v. 1, pt. 2, art. 10, p. 316–17.

Lincoln, Benjamin. An account of several strata of earth and shells on the banks of York-River, in Virginia; of a subterraneous passage, and the sudden descent of a very large current of water from a mountain, near Carlisle; of a remarkably large spring near Reading, in Pennsylvania; also of several remarkable springs in the states of Pennsylvania and Virginia . . . in a letter to Joseph Willard. M. v. 1, pt. 2, art. 16, p. 372–76.

1785 Annan, Robert. Account of a skeleton of a large animal found near Hudson's River. M. v. 2, pt. 1, art. 22, p. 160–64. Written in December.

Warren, James. Observations on the effects of light on vegetation. M. v. 2, pt. 1, art. 18, p. 146–47. Written Jan. 25.

Baylies, William. Description of Gay Head. M. v. 2, pt. 1, art. 20, p. 150–55. Written July 1.

Parsons, [S. H.]. Discoveries made in the western country. M. v. 2, pt. 1, art. 11, p. 119–27. Written, Middletown, Conn., Oct. 2.

West, Samuel. A letter concerning the mineral productions of Gay Head. M. v. 2, pt. 1, art. 19, p. 147–50. Written Oct. 9.

Drown[e], Samuel. Remarks on natural phosphorus. M. v. 2, pt. 2, p. 104–7. Written Dec. 30.

1787 Sargent, Winthrop. List of forest and other trees, northwest of the River Ohio. M. v. 2, pt. 1, art. 21, p. 156–59. Written in January.

1788 Edwards, Timothy. A description of a horn or bone, lately found in the River Chemung, or Tyoga, a western branch of the Susquehannah, about twelve miles from Tyoga Point. . . . M. v. 2, pt. 1, art. 23, p. 164–65. Written in January.

1789 Hitchcock, Samuel. An account of frogs found in the earth. . . . M. v. 2, pt. 1, art. 4, p. 63–4. Written Aug. 5.

1790 Bruyn, S. J. A letter on the retreat of swallows, and the torpid state of certain animals in winter. M. v. 2, pt. 1, art. 8, p. 96–9. Written April 3.

From Ulster Co., N. Y.

Webster, Noah, Jr. On the theory of vegetation. M. v. 2, pt. 1, art. 26, p. 178–85. Written, Hartford, Conn., June 12.

1791 Packard, [Asa]. A letter on the retreat of swallows, in winter. M. v. 2, pt. 1, art. 7, p. 93–5. Written Jan. 13.

1794 Peck, W. D. Description of four remarkable fishes taken near the Piscataqua in New Hampshire. M. v. 2, pt. 2, art. 1, p. [46]–57, 1 pl. Written Sept. 19.

1797 Lathrop, John. An account of the deleterious effects of mephitic air, or marsh miasma, experienced by three men, July 27, 1797, in a well, on the Boston pier. . . . M. v. 2, pt. 2, p. 81–4.

Gives a description of the strata through which the well was dug.

1798 Bennett, Nehemiah. Account of a water spout in Watuppa Pond, at Freetown. . . . M. v. 2, pt. 2, p. 70–2. Written Oct. 5.

1799 De Witt, Benjamin. An account of some of the mineral productions in the state of New York (accompanying specimens transmitted for the Cabinet of the American Academy of Arts and Sciences). . . M. v. 2, pt. 2, p. 73–81.

Written, Albany, N. Y., Sept. 2.

1800 Lathrop, John. An account of the springs and wells on the peninsula of Boston, with an attempt to explain the manner in which they are supplied. . . . M. v. 3, pt. 1, art. 8, p. [57]–68, illus. Written May 10.

1803 Fiske, Oliver. Account of the resuscitation of a mouse, found in a torpid state, enclosed in a fossil substance. . . . M. v. 2, pt. 2, p. 124–26.

Written, Worcester, Mar. 15.

1806 Harris, T. M. Account of pawpaw or cowry shells, found in Dorchester. M. v. 3, pt. 1, art. 25, p. 159–60. Written Oct. 22.

1807 Kendal, E. A. Account of the writing-rock [Dighton] in Taunton River. . . . M. v. 3, pt. 2, art. 27, p. 165–91. Written Oct. 29.

1808 Cleaveland, Parker. Account of fossil shells, with the author's reasons for attending to the same. . . . M. v. 3, pt. 2, art. 24, p. 155–58. Written Oct. 10.

See also Merrill, (1), p. 222. (Annot. Bib.)

1809 Tilden, Joseph. Account of a singular property of lamprey eels. M. v. 3, pt. 2, art. 46, p. 335–36.

The Petromyzon Marinus of Linnaeus.

Written, Hallowell, Me., Nov. 29.

Fothergill, A[nthony]. On the origin and formation of ice islands and their dangerous effects in navigation. . . . M. v. 3, pt. 1, art. 9, p. [69]–81.

Godon, S[ilvain]. Mineralogical observations, made in the environs of Boston in the years 1807 and 1808, inclosed with a letter to John Davis. . . . M. v. 3, pt. 1, art. 23, p. 127–54, 1 pl. (tab.)

See also Merrill, (1), p. 222. (Annot. Bib.) & his First 100 yrs Amer. Geol. 1924. p. 37–8.

Cutler, Manasseh. Observations on a singular natural production in which one part appears to be a plant and the other an insect, accompanied with a specimen. M. v. 3, pt. 1, art. 26, p. 161–64.

1810 Gorham, John. Analysis of sulphate of barytes, from Hatfield, Massachusetts. M. v. 3, pt. 2, art. 33, p. 237–40. Written Aug. 10.

1811 Tenney, Samuel. An account of an earthquake in New England. . . . M. v. 3, pt. 2, art. 49, p. 346–49. Written Mar. 29.

1812 Sargent, Winthrop. Account of several shocks of an earthquake in the southern and western parts of the United States. . . . M. v. 3, pt. 2, art. 50, p. 350–60.

Written, 2 miles south of Natchez, Miss., Apr. 2.

1816 Peck, W. D. Some observations on the sea-serpent. M. v. 4, art. 9, p. [86]–91.

————. Observations Carpologicae in Kamelliam and Theam. M. v. 4, art. 12, p. 103–9.

1818 Dana, J. F., and Dana, S. L. Outlines of the mineralogy and geology of Boston and its vicinity, with a geological map. M. v. 4, art. 15, p. [129]–223, map. Com. in August.

See also Merrill, (1), p. 228–30. (Annot. Bib.)

Contents:

class 1. Earthly fossils—p. 140–80.
2. Saline fossils—p. 181.
3. Inflammable substances—p. 182–83.
4. Metallick fossils—p. 184–95.
Compound minerals or rocks, p. 196–215.

1831 Nuttall, Thomas. Remarks and inquiries concerning the birds of Massachusetts. M. n. s. v. 1, art. 7, p. [91]–106, illus. Com. in April.

Jackson, C. T., and Alger, Francis. Remarks on the mineralogy and geology of Nova Scotia. M. n. s. v. 1, art. 9, p. [217]–330. Com. in August.

A revision and enlargement of the article in Amer. J. Sc. (1818), v. 14, p. 305–30, col. map. July, 1828; & v. 15, p. 132-60, 201–17, 2 pl. Oct. 1828 & Jan. 1829.

See also Merrill, (1), p. 288–90. (Annot. Bib.)

1843 Storer, D. H. Description of a new species of torpedo [occidentalis.] Rd April 25.

In Amer. J. Sc. (1818), v. 45, p. 165–70, 1 pl. July, 1843.

Pickering, John. On the language and inhabitants of Lord North's Island in the Indian Archipelago; with a vocabulary. M. n. s. v. 2, art. 5, p. [205]–47.

Contains remarks on the botany, zoology, etc., of the island.

Storer, D. H. A synopsis of the fishes of North America. M. n. s. v. 2, art. 7, p. [253]–550.

Com. to Amer. Assoc. Geol. & Nat. (1840), April 3, 1845. Contains a total of 35 families, 221 genera and 739 species. Indexes of popular and scientific names on p. 527–36 and p. 537–50 respectively.

Rev. in Amer. J. Sc. ser. 2, v. 2 (v. 52) p. 145–47. July, 1846.

1846 Gray, Asa. Chloris Boreali-Americana: Illustrations of new, rare or otherwise interesting North American plants, selected chiefly from those recently brought into cultivation at the Botanic Garden of Harvard University; [Decade I]. M. n. s. v. 3, art. 1, p. [1]–56, 10 col. pl. [69 fig.] Com. Jan. 27.

See also Cambridge Botanic Garden (1805)

Sullivant, W. S. Contributions to the Bryology and Hepaticology of North America; pt. 1. M. n. s. v. 3, art. 2, p. [57]–66, 5 pl. [70 fig.] Com. Aug. 12.

Abstract in P. v. 1, p. 35–6.

Pt. 2 com. Nov. 8, 1848 (q.v. below)

Gray, Asa. The characters of some new genera and species of compositae from Texas. P. v. 1, p. 46–50. Rd Dec. 1.

1847 Dana, J. D. Conspectus Crustaceorum, in orbis terrarum circumnavigatione C[arolo] Wilkes e classe Reipublicae Faederatae Duce, collectorum auctore; pt. 1. P. v. 1, p. 149–55. Rd May 4.

Pt. 1 Crustacea Copepoda (Cyclopacea)

Pt. 2. rd Nov. 8, 1848 (q.v. below)
See also Wilkes Explor. Exped. (1838), v. 13–14.

TUCKERMAN, Edward, Jr. A synopsis of the Lichenes of the Northern United States and British America. P. v. 1, p. 195–285. Rd Dec. 7.

Originally prepared for Gray's Manual of Botany of the United States, pub. 1848.

1848 HITCHCOCK, Edward. An attempt to discriminate and describe the animals that made the fossil footmarks of the United States, and especially of New England. M. n. s. v. 3, art. 7, p. [129]–256, 24 pl. [132 fig.] Com. April 29.

See also MERRILL, (1), p. 630. (Annot. Bib.) & his First 100 yrs Amer. Geol. 1924. p. 559–60.
Rev. in Amer. J. Sc. v. 58 (ser. 2, v. 8), p. 151–52. July, 1849.

LE CONTE, J. L. On Platygonus compressus: a new fossil Pachyderm. M. n. s. v. 3, art. 8, p. [257]–74, 4 pl. [26 fig.] Com. May 29.

DANA, J. D. Conspectus Crustaceorum, in orbis terrarum circumnavigatione, Carolo Wilkes e classe Reipublicae Faederatae Duce; lexit et descripsit; pt. 2. P. v. 2, p. 9–61. Rd Nov. 8.

Pt. 1 rd May 4, 1847 (q.v. above)
Pt. 3 rd Feb. 6, 1850 (q.v. below)
Abstracts in Amer. J. Sc. (1818), v. 58 (ser. 2, v. 8), p. 276–85, 424–28. Sept. & Nov. 1849.
See also Wilkes Explor. Exped. (1838), v. 13 & 14.

DAVIS, C. H. A memoir upon the geological action of the tidal and other currents of the ocean. M. n. s. v. 4, pt. 1, art. 2, p. [117]–56, 2 maps, charts. Rd Nov. 8.

Abstract in P. v. 2, p. 100–1.
Rev. in Amer. J. Sc. v. 69 (ser. 2, v. 19), p. 263–69. July, 1849.

GRAY, Asa. Plantae Fendlerianae Novi-Mexicanae; an account of a collection of plants made chiefly in the vicinity of Santa Fé, New Mexico, by Augustus Fendler; with descriptions of the new species, critical remarks, and characters of other undescribed or little known plants from surrounding regions. M. n. s. v. 4, pt. 1, art. 1, p. [1]–116. Com. Nov. 8.

Abstract in P. v. 2, p. 5–9. Art. above pub. Feb. 10, 1849. Fendler was sent out by the Smithsonian Inst. (1846). The collections were made during the interval between April & Aug. 1847. Fendler left Ft. Leavenworth, Aug. 10, 1846, in the company of the military exped. under Lt. J. W. Abert, just departing for its expedition to New Mexico (1846), q.v.

HALDEMAN, S. S. History and transformation of Corydalus cornutus. M. n. s. v. 4, pt. 1, art. 3, p. [157]–61, 1 pl. [7 fig.] Com. Nov. 8.

LEIDY, Joseph. Internal anatomy of Corydalus cornutus in its three stages of existence. M. n. s. v. 4, pt. 1, art. 4, p. [162]–68, 2 pl. [18 fig.] Com. Nov. 8.

SULLIVANT, W. S. Contributions to the Bryology and Hepaticology of North America; pt. 2. M. n. s. v. 4, pt. 1, art. 5, p. [169–76], 5 pl. [58 fig.] Com. Nov. 8.

Pt. 1 com. Aug. 12, 1846 (q.v. above)
Mainly description of the mosses collected by Fendler in New Mexico. See Note under GRAY, Asa. Plantae Fendlerianae—three entries above—rd Nov. 8, 1848. See also Abert's Examination of New Mexico (1846).

1849 FOSTER, [J. W.] On certain phenomena connected with the rise and fall of the waters of the northern lakes. P. v. 2, p. 131–36. Rd Feb. 6.

AGASSIZ, Louis. A summary account of investigations upon Medusae. P. v. 2, p. 148–49. Rd May 8.

————. Contributions to the natural history of the Acalephae of North America; [2 parts.] M. n. s. v. 4, pt. 2, art. 9 &10, p. [221]–374, 16 pl. [202 fig.] Com. May 8 & 29.

Pt. 1 (art. 9) On the naked-eyed Medusae of the shores of Massachusetts, in their perfect state of development. p. [221]–316, 8 pl. [126 fig.]
Pt. 2 (art. 10) On the Beroid Medusae of the shores of Massachusetts in their perfect state of development. p. [313]–74, 8 pl. [76 fig.] (p. 313–16 are duplicated).
Abstract in P. v. 2, p. 148–49.

DEANE, James. Illustrations of fossil footprints of the valley of the Connecticut. M. n. s. v. 4, pt. 1, art. 8, p. 209–20, 9 pl. [24 fig.] Com. Aug. 8.
See also MERRILL, (1), p. 631.

GRAY, Asa. . . . Some account of Argyroxiphium, a remarkable genus of Compositae, belonging to the mountains of the Sandwich Islands. P. v. 2, p. 159–60. Rd Aug. 8.
See also Wilkes Explor. Exped. (1838), v. 15. (GRAY)

AGASSIZ, Louis. On the development of ova in insects. P. v. 2, p. 181. Rd Nov. 6.

————. Some remarks on the egg in vertebrate animals, as a means of classification. P. v. 2, p. 183–84. Rd Dec. 4.

1850 HAYES, A. A. (1) On some specimens of copper from Lake Superior; (2) On the urinary deposit called "Red Sand." P. v. 2, p. 195, 196. Rd Jan. 8.

DANA, J. D. Conspectus Crustaceorum, quae in orbis terrarum circumnavigatione Carolo Wilkes e classe Reipublicae Faederatae Duce, lexit et descripsit; pt. 3. P. v. 2, p. 201–20. Rd Feb. 6.
Pt. 1 rd May 4, 1847 (q.v. above)
2 rd Nov. 8, 1848 (q.v. above)
Continuations rd before Phila. Acad. Nat. Sc. (1812), Aug. 19, 1851 & Jan. 6, 1852 (q.v.).
See also Wilkes Explor. Exped. (1838), v. 13–14.
These are all preliminary observations subsequently included in his v. 13–14 of the Explor. Exped. under Wilkes.

AGASSIZ, Louis. Some new views respecting the coloration of animals. P. v. 2, p. 234. Rd June 4.

———. . . . There are certain animals, capable of performing all the great functions of animal life, which consist entirely of cells. P. v. 2, p. 236. Rd July 2.

———. (1) On Siluridae . . .; (2) On a Bonito; (3) . . . On catfish. . . . P. v. 2, p. 238–39. Rd Aug. 6.

BURNETT, W. J. Researches upon the origin, mode of development, and nature of the spermatic particles among the four classes of the vertebrated animals. M. n. s. v. 5, pt. 1, art. 3, p. [29]–48, 1 pl. [48 fig.] Rd [Aug. 6.]

JACKSON, C. T. Remarks on specimens of native phosphate of lime, or apatite, from a large vein, discovered . . . in Hurdstown, N. J. P. v. 2, p. 241–42. Rd Oct. 1.

ALGER, Francis. Remarks on several very remarkable crystals of gold from California. P. v. 2, p. 246–49, illus. Rd Dec. 3.
Remarks by C. T. Jackson, p. 249–50.

1851 HALL, James. Some account of investigations . . . on Drummond's Island, and the north shore of Lake Huron and Lake Michigan, in connection with the Geological Survey under the direction of Messrs Foster and Whitney. P. v. 2, p. 253–54. Rd Jan. 7.
See also Foster & Whitney's Surv. (1849)

AGASSIZ, Louis. Results of some observations . . . on the Florida coral reefs. P. v. 2, p. 262–63. Rd April 1.

ALGER, Francis. On a remarkable specimen of fossil Sigiluria from the sandstone of the coal formation of Nova Scotia. P. v. 2, p. 263–64. Rd April 1.

DESOR, [Edward]. Some remarks on the first appearance of the Vertebrata in geological strata. P. v. 2, p. 263. Rd April 1.

AGASSIZ, [Louis], and others. Some new views in regard to the geological position of the coal at Mansfield, Mass. P. v. 2, p. 270–71. Rd Nov. 4.
Remarks by T. T. Bouvé, C. T. Jackson & E. N. Horsford.

DESOR, [Edward]. . . . Some remarks on the origin of the contorted strata of sand and clay in the diluvial deposits. . . . P. v. 2, p. 282–83. Rd Dec. 2.

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AGASSIZ, Alexander. On the embryology of the Echinoderms. M. n. s. v. 9, pt. 1, art. 1, p. [1]–30, 4 pl. [31 fig.]. Com. Feb. 2.

TUCKERMANN, Edward Jr. Observations on North American and other Lichenes. P. v. 6, p. 263–87. Rd April 12.

Previous pt. rd April 22, 1862 (q. v. above).

ROTHROCK, J. T. Synopsis of North American Gaurineae. P. v. 6, p. 347–54. Rd Aug. 10.

1865 CLARK, H. J. Proofs of the animal nature of the cilioflagellate Infusoria, as based upon investigations of the structure and physiology of one of the Peridiniae (Peridinium cypripedium, n. sp.). P. v. 6, p. 393–402, 1 pl. [7 fig.]. Rd Feb 14.

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GRAY, Asa. Characters of some new plants of California and Nevada, chiefly from the collections of Professor William H. Brewer, botanist of the state geological Survey of California and of Dr. Charles L. Anderson, with revisions of certain genera or groups. P. v. 6, p. 519–56. Rd May 30.

Notes on ferns, by D. C. EATON, p. 555–56.

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PEALE'S PHILADELPHIA MUSEUM (1784)

History

''Charles Willson Peale's Museum had its modest origin in 1784, in a paddle fish from the Alleghany River, some bones of a Mastodon from Ohio, and his pictures, at first stored in a frame building annexed to his dwelling at the southwest corner of Lombard and Third Streets, Philadelphia. In 1794 his collection was moved to the Hall of the American Philosophical Society (1769), q. v., and in 1802, the State of Pennsylvania granted a part of the old State House (Independence Hall) for the exhibition of Peale's accumulations.

''The active management of the Museum devolved upon Peale's sons in 1808, and in 1820, the property was divided into shares and a stock company incorporated by the Act of the Pennsylvania Legislature, the official title of the corporation being the Philadelphia Museum Company. The collection was transferred in 1828 to the Arcade on Chestnut Street above Sixth Street, and again in 1838 to a building in Ninth and Samson Streets. Eight years after, the Museum Company came to grief, the collections were sold off by auction, but the natural history collection was still kept together and exhibited in Masonic Hall till 1850, when it was bought for $5,000 or $6,000 by Moses Kimball and P. T. Barnum.

''The scientific importance of Peale's Museum arose from several causes. The records show that the institution was in touch not only with the contemporary museums in the United States such as the Columbian of Boston, the New York Museum, and Mix's New Haven Museum, but also with the great scientific establishments of Europe, in Paris, London, Stockholm, etc. Peale and his sons were in correspondence, moreover, with many of the most prominent naturalists of Europe, such as Geoffrey St.-Hilaire, Cuvier, Lamarck, Maximilian, Prince of Wied, and John Latham.

''I believe that a part of the Leverian Museum found its way into Peale's Museum; certainly the booty of the Lewis and Clark Expedition (1804), q.v., was deposited there in December, 1809; and the collections made by the Expedition of Major Long to the Rocky Mountains (1819), q.v., in 1819–20 were added on March 23, 1821. Peale's son, Titian Ramsay, was assistant naturalist of the latter expedition, Thomas Say being the head naturalist. But the chief cause of the importance ascribed to Peale's collection lay in the use made of it by that remarkable coterie of naturalists who made Philadelphia the metropolis of natural history in America during the early part of the nineteenth century; . . . the Peale Museum became the depository of a very large number of the types of animals described by the Philadelphia naturalists . . ." FAXON, Walter. p. 125–26. (See below BIBLIOGRAPHY: 1915: FAXON).

From time to time, the Museum issued publications descriptive of the collections of the Museum. In 1824, a serial publication was attempted but it was short-lived, although Prof. Troost, Say, Harlan and Godman were actively associated with the Museum. Excellent historical accounts of the various aspects of the Museum's life may be found in the papers by Faxon, Colton and Stone (see below BIBLIOGRAPHY).

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1899 STONE, Witmer. Some Philadelphia ornithological collections and collectors, 1784–1850. (In Auk. v. 16, p. 166–77. Apr. 1899)

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1909 COLTON, Harold Sellers. Peale's Museum. (In Pop. Sc. Mthly. v. 75, p. 221–38. Sept. 1909)

1915 FAXON, Walter. Relics of Peale's Museum. Cambridge, Mass., July, 1915. (In Mus. Comp. Zool. Bull. v. 59, no. 3, p. 117–48)

A portion of the historical account is reprinted above under the HISTORY, q.v.

UNIVERSITY OF THE STATE OF NEW YORK, REPORTS OF THE BOARD OF REGENTS, ALBANY, N. Y. (1787)

History

The University of the State of New York, although established by the act of May 1, 1784, was reorganized upon its present lines, by virtue of the act of 1787. Beginning with its Annual Report for 1831, and continuing through the fifties, many botanical contributions from local communities throughout New York State, submitted by the various academies, etc., comprising the University, were published in the Annual Reports of the Board of Regents.

From 1843 to date, the Board of Regents of the University have also had under their jurisdiction, the New York State cabinet of Natural History (1843), q.v., which subsequently became the present New York State Museum.

A list of the Regents' Reports, generally published about March the first of each year, may be found in HASSE, A. R. Index to Economic Material N. Y. Nov. 1907. p. 217–18.

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1831 MEAD, S. B. A catalogue of plants growing spontaneously in the vicinity of North Salem Academy.
In 54th sess., Sen. Doc. no. 50. p. 89–97. Serial no. 116.
Cont. in 45th Rept. 1832. 55th sess., Sen. Doc. no. 72. p. 101. Serial no. 124.

46th

1833 GRAY, Asa. A catalogue of the indigenous flowering and filicoid plants growing within twenty miles of Bridgewater, Oneida County, N. Y.
In 56th sess., Sen. Doc. no. 70. p. 57–65. (v. 2). Serial no. 132.

BRADFORD, G. W. A catalogue of the plants growing spontaneously within the vicinity of Cortland Academy, Homer, Cortland County, N. Y. p. 66–71.
See preceding entry.

48th

·1835 ZABRISKIE, J. B. Catalogue of plants indigenous and cultivated found in the vicinity of Erasmus Hall, Brooklyn, N. Y.
In 58th sess., Sen. Doc. no. 70. p. 176–81. (v. 2). Serial no. 148.

50th

1837 Hendrick, J. L. A catalogue of plants found growing chiefly in the vicinity of Onondaga Academy, collected during the summer of 1834 and 1835.

In 60th sess., Sen. Doc. no. 45. (v. 1), p. 182–88. Serial no. 164. Cont. in 51st Rept. 61st sess., Sen. Doc. no. 52. p. 216–17. Serial no. 173. 1838.

52d

1839 Woodworth, W. V. S. A catalogue of indigenous plants found growin the vicinity of Kinderhook Academy, and analyzed by the botanic class in that institution, during the summer of 1838.

In 62d sess., Sen. Doc. no. 56 (v. 2). p. 252–53. Serial no. 183.

54th

1841 Thompson, Alexander. Catalogue of plants found in the vicinity of Aurora, Cayuga County, during the year 1840 . . .

In 64th sess., Sen. Doc. no. 39 (v. 2). p. 224–26. Serial no. 208.

Platt, M. Plants collected and examined by the botanic class in the Delaware Literary Institute, during the summer term of 1840. p. 227–31.

55th

1842 Dewey, Chester. Catalogue of plants and their time of flowering in and about the city of Rochester, for the year 1841 . . .

In 65th sess., Sen. Doc. no. 55, (v. 3), p. 265–72. Serial no. 221.

Knieskern, P. D. Catalogue of plants found in the county of Oneida, compiled and arranged according to Dr John Torrey's Report of 1840. p. 273–99.

56th

1843 Dewey, Chester. Botanical calendar kept at Rochester.

In 66th sess., Sen. Doc. no. 57 (v. 2). p. 311–16. Serial no. 233.

57th

1844 ————. Flowering of shrubs and trees . . . about Rochester.

In 67th sess., Sen. Doc. no. 78 (v. 2). Serial no. 244.

58th

1845 ————. Calendar of flowering.

In 68th sess., Sen. Doc. no. 51 (v. 2). p. 214–17. Serial no. 257.

Sartwell, H. P. Catalogue of plants growing without cultivation in the vicinity of Seneca and Crooked Lakes in western New York. p. 273–90.

59th

1846 Hough, F. B. A catalogue of the indigenous, naturalized, and filicoid plants of Lewis County, arranged according to the natural method adopted by Prof. Torrey in the State Catalogue.

In 69th sess., Sen. Doc. no. 71 (v. 2), p. 249–83. Serial no. 269.

60th

1847 Barratt, Joseph. Report on the season of 1846, the time of flowering of fruit trees, the time of late spring and early fall frosts . . . with notes to show the progress of the season of 1839 at Middletown, Conn.
In 70th sess., Sen. Doc. no. 101 (v. 3). p. 256–68. Serial no. 282.

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1849 Merriam, E. Geological and meteorological notes of a visit to the Whiteface peak of the Adirondacks.
In 72nd sess., Sen. Doc. no. 78 (v. 2). p. 308–15. Serial no. 309.

64th

1851 Winchell, Alexander. Catalogue of plants found growing without cultivation in the vicinity of Amenia Seminary, Dutchess County, N. Y.
In 74th sess., Sen. Doc. no. 72 (v. 3). p. 256–79. Serial no. 336.

65th

1852 Howell, Robert. Catalogue of forest trees growing wild in the town of Nichols, Tioga Co., N. Y.
In 75th sess., Sen. Doc. no. 92 (v. 2). p. 392–95. Serial no. 347.

66th

1853 Dewey, Chester. Flowering of plants at Rochester, 1852, many of which were proposed for observation by the Smithsonian Institute.
In 76th sess., Sen. Doc. no. 70 (v. 2). p. 254–58. Serial no. 358.

67th

1854 ————. Leafing and flowering of plants . . .
In 77th sess., Sen. Doc. no. 77 (v. 2). p. 295–96. Serial no. 370.
Howell, Robert. Appearance of spring birds, etc., at Nichols, Tioga Co., N. Y., for the year 1853. p. 311–13.

THE SOCIETY FOR THE PROMOTION OF AGRICULTURE, ARTS AND MANUFACTURES, NEW YORK CITY AND ALBANY (1791)

History

THE SOCIETY INSTITUTED IN THE STATE OF NEW YORK FOR THE PROMOTION OF AGRICULTURE, ARTS AND MANUFACTURES was organized in New York City, then the capital of the state, February 26, 1791, in the State Senate-Chamber. It was incorporated March 12, 1793.

"The objects of investigation for the Society shall be agriculture, manufactures, and arts, with such subjects of inquiry as may tend to explain, or elucidate their principles." From the CONSTITUTION.

Its president from 1791–1813 was Robert R. Livingston. Ezra L'Hommedieu was vice-president, and S. L. Mitchill and Benjamin De Witt, its secretaries.

In 1798 the Society's headquarters were transferred to Albany. In 1804, upon the expiration of its charter, it was re-organized under the name of the SOCIETY FOR THE PROMOTION OF USEFUL ARTS (1804), q.v.

Only one volume of Transactions was issued under the first name of the Society, in four parts, 1792–99, and a second edition appeared in 1801.

The chief contribution of the Society to natural history was MITCHILL'S "Sketch of the mineralogical history of N. Y.". . . , for which see the PAPERS ON NATURAL HISTORY, below.

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ed. 2, 1801, 418 p. Albany, C. R. & George Webster, 1801.

For v. 2–4, see SOCIETY FOR THE PROMOTION OF USEFUL ARTS (1804).

1871 MEADS, O[rlando]. Annual address . . . [On the leading facts in the history of the Society] . . . (In Albany Inst. Trans. v. 7, p. 1–34. 1872)

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Ed. 1	Ed. 2
pt. 1, 1792, 15 + 122 p.	pt. 1, 1801, 8 + p. 1–92
2, 1794, 230 p.	2, p. 93–189
3, 1798, 129 p.	3, p. 191–289
4, 1799, 4 + 178 p.	4, p. 291–418

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1792 Livingston, R. R. Experiments and observations on calcarious and gypsious earths. T. pt. 1, p. 25–54.

In 2d ed. p. 34–56.

Havens, J. N. Observations on the Hessian fly. T. pt. 1, p. 89–107.

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1794 De La Bigarre, Peter. Excursions on our Blue Mountains. T. pt. 2, p. 128–39.

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1798 De Witt, Benjamin. A memoir on the Onondaga salt springs, and salt manufactures, in the state of New York. T. pt. 3, p. 99–124.

In 2d ed. p. 268–86.

1799 MITCHILL, S. L. Observations on cankerworms, and the means of preventing their effects. T. pt. 4, p. 33–41.

In 2d ed. p. 314–21. Written Mar. 30, 1795.

WATKINS, John. An account of the natural productions of the western part of this state. T. pt. 4, p. 46–50.

In 2d ed. p. 324–27.

L'HOMMEDIEU, Ezra. Observations on the growth and nourishment of plants. T. pt. 4, p. 67–72.

In 2d ed. p. 335–39.

JOHNSON, Robert. Observations on marle . . . T. pt. 4, p. 78–9.

MITCHILL, S. L. A sketch of the mineralogical history of the state of New York, by . . . the Commissioner appointed to make a tour through the state of New York, in the vicinity of Hudson's River. . . . T. pt. 4, p. 124–52.

Not in 2d ed. Was to have been cont. in a future volume. Report made Oct. 20, 1796.

The Report was first printed in the MED. REPOS. (1797), ed. by MITCHILL, as follows: v. 1, no. 3, art. 1, p. 293–314; no. 4, art. 1, p. 445–52. Jan. & April, 1798 (ed. 1)

In 2d ed., v. 1, p. 279–303, 431–39.(1800)

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Cont. in v. 3, no. 4, art. 1, p. 325–35. April, 1800 (1st ed.). Same in 2d ed., (1805)

Cont. in v. 5, no. 2, p. 212–14. Oct. 1801.

BILLINGS, Andrew. Observations on bots. T. pt. 4, p. 176–78.

In 2d ed. p. 392–94. Written Nov. 22, 1799.

THE HARVARD COLLEGE MINERALOGICAL CABINET, CAMBRIDGE, MASS. (1793)

History

"Dr Benjamin Waterhouse began the mineral collection (the oldest in the United States) in 1784, but in 1793 the real foundation of the present collection was laid by the gift from Dr Lettsom, a London physician, of 'a very valuable and extensive collection of minerals,' to which he subsequently made additions. The Corporation provided a Cabinet and appointed Dr Waterhouse keeper of the collection. In 1795, M. Mozard, consul in Boston of the French Republic, acting under a resolution of the committee of Public Safety of the National Convention of France, presented two hundred specimens 'as samples of the riches of the French soil' and solicited an interchange of specimens between the University and the 'agency of the mines of the Republic.'

"No important additions were made until 1820, when Dr. Andrew Richie purchased and presented the collection of C. A. Blöde, a mineralogist and chemist of Dresden, to which were added some thousand specimens purchased in 1824 by a subscription from several Boston gentlemen ,and the collection was then arranged by Dr J. H. Webster, and exhibited in the second storey of Harvard Hall, where it remained for thirty-three years. It increased slowly, and about 1840 contained 26,000 specimens, including rocks and other miscellaneous material. It owes its present value, both in quality and size, chiefly to the late Josiah P. Cooke, Erving Professor of Chemistry and Mineralogy from 1850 to 1894. . . . Professor Cooke for nearly half a century gave his affectionate care to the collection. Starting with what was worth preserving of the old collection, he gradually acquired new or better material by purchase, or donations, or exchange, while several large single additions were made from time to time. On the completion of Boylston Hall in 1858, the mineral cabinet was placed there and it remained there until the erection of the present mineralogical museum." HARVARD MEMORIAL SOCIETY. p. 110–11 (see Bibliography below) In 1820, Joseph Green Cogswell was made professor of mineralogy and put in charge of the Cabinet. From 1837–1840, some 1,500 specimens were received from the Mass. Geol. Surv. (1830), q.v., under Hitchcock.

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1840 QUINCY, Josiah. History of Harvard College Mineralogical Cabinet. (In his History of Harvard College. 1840. v. 2, p. 399–402, 544–45)

1907 HARVARD MEMORIAL SOCIETY. History of the mineralogical collection. Cambridge, Mass., 1907. (In its Official guide to Harvard University. p. 110–12)

THE MEDICAL REPOSITORY, NEW YORK CITY (1797)

History

In a "Circular Address" prefaced to number 1 of volume 1 issued July 26, 1797, and dated November 15, 1796, the editors of the MEDICAL REPOSITORY, Samuel L. Mitchill, Elihu H. Smith and Edward Miller requested of their readers, among other things, these pertaining to the subject of natural history:

> "3) Accounts of insects—whether any uncommon dearth or numbers of them; whether troublesome or noxious to men, beasts or vegetables; with as accurate and minute notices as may be of their derivation, mode of propagation, nature and extent of such ravages, or other evils, as they may occasion; of their appearance and disappearance, and of the means, if any of guarding against or destroying them.
>
> "4) Histories and progress and condition of vegetation, with regard to growth, vigour and disease, independent of the ravages of insects—but marking the influence of manures and the local situation, both as to elevation and soil, air and water . . ."
>
> Also . . . "Interesting information relative to the minerals, plants and animals of America" From Med. Repos. v. 1, pref. p. 9, 10, 12. (ed. 1).

The MEDICAL REPOSITORY was the first strictly scientific periodical in the United States, although primarily devoted to medicine and the closely allied and associated sciences. During the first twenty-five years of its life it appeared quarterly quite regularly, but toward the end of its career its appearances were exceedingly irregular and are difficult to determine accurately.

Its contributions to natural history were due chiefly to the interests and efforts of the senior editor, often called the ''Nestor of American science,'' Samuel Latham Mitchill. Associated with him in its editorial capacities were Elihu H. Smith, Edward Miller, Samuel Akerly, Felix Pascalis, James R. Manley and Charles Drake. It existed from 1797 to 1824 and in all there appeared 23 volumes.

With the appearance of other agencies, chiefly the organs of scientific societies, devoted more nearly to the diffusion of scientific knowledge, the MEDICAL REPOSITORY printed fewer and fewer articles on natural history.

Under the BIBLIOGRAPHY below are given the bibliographical details of the set as it appeared under the four different titles. There are few perfect sets in American libraries, and many confuse the extra editions of the first three volumes with the original ones. Under Dates of Publication are noted the details of the various volumes in the set.

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(A)

1797 (The) MEDICAL REPOSITORY. . . N. Y. T. & J. Swords, 1797–1800. 3 v. (v. 1–3, of Hexade 1)

2d ed. 1800; 3d ed., 1804 (of v. 1), and 2d ed. 1800; 3d ed., 1805 (of v. 2) read (The) MEDICAL REPOSITORY: conducted by Samuel L. Mitchill, Edward Miller and Elihu Smith. To v. 3 (1st ed.), was added: Conducted by Samuel L. Mitchill and Edward Miller; Smith having died before the appearance of v. 3.
2d ed. of v. 3, 1805.

(B)

1800 (The) MEDICAL REPOSITORY, and review of American publications on medicine, surgery, and the auxiliary branches of philosophy; conducted by Samuel L. Mitchill and Edward Miller. N. Y. T. & J. Swords, 1800–7. 7 v. (v. 4–10)

This includes v. 4–6 of Hexade 1, and v. 1–4 of Hexade 2.
2d ed. of v. 4 (Hexade 1), 1808.

(C)

1807 (The) MEDICAL REPOSITORY comprehending original essays and intelligence relative to medicine, chemistry, natural history, agriculture, geography and the arts; more especially as they are cultivated in America, and a review of American publications in medicine and the auxiliary branches of same; conducted by Samuel Latham Mitchill and Edward Miller. N. Y. T. & J. Swords, 1807–12. 5 v. (v. 11–15)

This is v. 5–6 of Hexade 2, and v. 1–3 of Hexade 3. Miller died before the appearance of the next volume.

(D)

1812 (The) MEDICAL REPOSITORY of original essays and intelligence relative to physic, surgery, chemistry, and natural history, with a critical analysis of recent publications on those departments of knowledge and their auxiliary branches; conducted by Samuel L. Mitchill, Felix Pascalis, and Samuel Akerly. N. Y. Printed by John Forbes, 1812–24. 8 v. (v. 16–23)

Contains new series, v. 1–8 (end). v. 16, no. 1 appeared probably in Oct. 1812. With v. 16, Miller's name dropped and those of Akerly and Pascalis substituted. Akerly's name dropped in v. 20, and those of James R. Manley and Charles Drake added in v. 21. v. 22 & 23 were conducted by Manley & Drake only.

Dates of Publication of the Separate Volumes

1st Hexade,	v. 1	1797–98	ed. 1
		1800	ed. 2
		1804	ed. 3
	v. 2	1798–99	ed. 1
		1800	ed. 2
		1805	ed. 3
	v. 3	1799–1800	ed. 1

			1805	ed. 2
		v. 4	1800–01	ed. 1
			1808	ed. 2
		v. 5	1801–02	
		v. 6	1802–03	
2d Hexade,	v. 1	or v. 7	1803–04	
	v. 2	or v. 8	1804–05	
	v. 3	or v. 9	1805–06	
	v. 4	or v. 10	1806–07	
	v. 5	or v. 11	1807–08	
	v. 6	or v. 12	1808–09	
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	v. 7	or v. 22	1821–22	
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1797 **vol. 1, no. 1, July**

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ed. 2 & 3, p. 86–95
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ed. 2 & 3, p. 118.

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Cont. in v. 1, no. 4 below (q.v.)
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DEMING, Julius, SMITH, Reuben, and REEVE, T. Facts relative to that faculty of animals which has been called instinct; respecting a wren (Motacilla domestica, Linn.); a robin (Turdus migratorius). p. 367–70.
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MITCHILL, S. L. A sketch of the mineralogical and geological history of the state of New York . . . art. 1, p. 445–52.
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BRICKELL, [John]. [. . . Description of the Jeffersonia]. p. 573.
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SMITH, E. H. Concerning the elk. art. 8, p. 168–73, 1 pl.
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CHAPMAN, Isaac. An account of a species of Cantharis found in Buck's County, Pennsylvania, including observations on its medicinal qualities. art. 9, p. 174–77.
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M[ITCHILL, S. L.]. A new variety of iron-ore of the argillaceous kind, and resembling basaltes. p. 219–20.
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[MITCHILL, S. L.]. [A review of] B. S. Barton's "Fragments of the natural history of Pennsylvania, part. 1." art. 2, p. 177–89. (Ed. 2, same).

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In appx. art. 1. Written Sept. 20, 1800. (ed. 2, same)

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Written July 18, 1800. (ed. 2, same)

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Woodhouse, James. An account of a new, pleasant and strong bitter and yellow dye, prepared from the stem and root of the Xanthorhiza tinctoria, or shrub yellow-root. . . . art. 11, p. 159–64, 1 pl.

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Written Oct. 1801. For previous pts., see above, v. 3, no. 4.

1802 **v. 5, no. 4 April**

Pintard, John. Observations respecting Louisiana and the western countries adjoining the Mississippi made during a visit . . . to New Orleans in 1801. appx. art. 3, p. 489–92.

v. 6, no. 1 July

Warden, David. Observations on the natural history of the village of Kinderhook, and its vicinity. . . . art. 2, p. 4–18.

1803 **v. 6, no. 3 January**

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Brickell, [John] Botanical intelligence. . . . p. 327–28.

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Bartram, William. Account of the species, hybrids, and other varieties of the vine of North America. art. 3, p. 19–24.

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v. 7, no. 2 October

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Anon. Remarkable facts touching the geology of the Atlantic territory of Virginia. p. 201.

1804 **v. 7, no. 3 January**

Mitchill, [S. L.] Remarks on some parts of New York, made in [September], 1802. p. 285–89.

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Smith, John. Further information concerning Upper Louisiana. . . . p. 411–14. Written Mar. 8, 1804.

v. 8, no. 1 July

Fairlie, James. The thresher or long-tailed shark. p. 77–8, illus.

Mitchill, S. L. An ovo-viviparous animal: peculiarities in the anatomy and physiology of the shark . . . as respects the production of its young. p. 78–81, illus.

————. Disclosures in mineralogy, from specimens. . . . p. 81–3.

————. Cod fishery of the U. S. p. 87.

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Macrery, Joseph. A description of the hot springs and volcanic appearances in the country adjoining the river Ouachitta in Louisiana. . . . p. 47–50.

1806 **v. 9, no. 3 January**

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v. 9, no. 4 April

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v. 10, no. 1 July

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ANON. A splendid cavern discovered in the limestone country of Virginia in 1806. p. 298–300.

v. 10, no. 4 April

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v. 11, no. 2 October

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ANON. Further discoveries in fossil zoology. p. 318–19.

v. 11, no. 4, April

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v. 12, no. 1, July

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ANON. Arrangement for a museum of minerals. p. 91–2.

HAMLIN, Amos. Observations on bots in horses . . . p. 124–25.

v. 12, no. 2, October

SMITH, Jobe. Discovery of valuable minerals. p. 194–95.

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1810 **v. 13, no. 3, January**

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1813 v. 16, no. 2, March ?

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v. 16, no. 3, May

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v. 18, no. 1, September ?

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1822 **v. 22, no. 3, June**

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AMERICAN MINERALOGICAL SOCIETY, NEW YORK CITY (1798)

History

"An association has been formed in the city of New York for the 'investigation of the mineral and fossil bodies which compose the fabric of the globe; and more especially for the natural and chemical history of the minerals and fossils of the United States' by the name and style of the American Mineralogical Society . . ."

"The American Mineralogical Society, instituted in the city of New York, desirous of obtaining and diffusing, by every means in their power, a correct and extensive knowledge of the mineral treasure of their country, and considering the importance of certain species of information, at the present time earnestly solicit . . .

communications on all mineralogical subjects, but especially on the following:

(1) Stones suitable for gunflint, etc.
(2) Native brimstone and sulphur.
(3) Salt-petre.
(4) Mines and ores of lead, etc.''

Extracted from an article in the MEDICAL REPOSITORY (1797), v. 1 (ed. 1), p. 114–15, 1798; or v. 1 (ed. 2 & 3), p. 105–6, 1800 & 1804; and v. 2 (ed. 1), p. 115, 1798; or v. 2, (ed. 2 & 3), p. 106–7, 1800 & 1805.

''And the ardor of Dr Mitchill's zeal is illustrated in the description of the object of the association which he said 'was to arm every hand with a hammer, and every eye with a microscope.' '' (From L. C. BECK in Nat. Hist. Surv. N. Y. pt. 3, Mineralogy, v. 1, pref. p. 9–10. 1842.)

The officers during its short-lived existence were S. L. Mitchill, president, Solomon Simpson, vice-president, E. H. Smith, secretary, and Edward Miller, treasurer.

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CONNECTICUT ACADEMY OF ARTS AND SCIENCES, NEW HAVEN (1799)

History

''As early as the year 1779, some movement was made towards the formation of a scientific society in the state of Connecticut. In the ninth volume of the ''Literary Diary'' left by the learned and Reverend Dr Ezra Stiles, president of Yale College, under date of November 1, 1779, occurs the following statement concerning this subject:

> 'Mr Guild, tutor of Harvard College, visited us this day. He has been to Philadelphia and is planning an Academy of Sciences in Massachusetts. I had much conversation with him upon this, as well as upon an Academy of Sciences I am meditating for Connecticut.'

Dr Stiles urged the formation of a society of arts and sciences, but with no success. Finally in May, 1786, a Society known as the

Connecticut Society of Arts and Sciences was founded. It probably did not receive legislative sanction. . . . Its Constitution contained three clauses relative to natural history:

> 'Materials that will assist in forming a natural history of the country . . . botanical descriptions and discoveries . . . the history and description of descriptive insects, with the best means of preventing and destroying them. The only paper of importance was by Jonathan Edwards, D.D., "On the language of the Mohegan Indians.'" HERRICK, p. 23–8 (see Bibliography below—1840)

The present Academy was formed at New Haven on March fourth, 1799, by an association of 22 men. Timothy Dwight was its first president and remained so until 1817. In October, 1799, the Academy was incorporated by the Legislature.

In 1810 the first part of its only volume of Memoirs made its appearance. Parts two, three and four appeared in 1811, 1813 and 1816 respectively.

"On the establishment of the American Journal of Science (1818), by Professor Silliman, the Academy discontinued the further issue of its Memoirs in a separate form, and adopted this work as its medium of publication. This Journal made its first appearance in July, 1818 (q.v.). The advantages gained are that its scientific contributions are published more speedily and abundantly."

"It was at one period, a favorite object with the Academy, to cause to be made a Geological Survey of the state of Connecticut. After some unavailing efforts to obtain the aid of others, they appropriated in 1818, a sum of money for the purpose of commencing the work. The resources of the Academy, were, however, inadequate to the completion of so expensive an undertaking, and the project was at length given up. This important labor has been recently accomplished, at the cost of the state, by Dr James G. Percival and Prof. Charles U. Shepard, both members of the Academy . . ." HERRICK, 1840, p. 27–8. (see Bibliography below).

The number of members in 1840 was about 170, half of whom resided outside of New Haven. The Academy did not issue its second volume, called the Transactions until 1866. Its contributions to natural history seem to have been few and far between from the date of its foundation to the close of the Civil War. Many of the papers were published in the American Journal of Science (1818), the editors of which were members of the Academy; but, unfortunately their reading before the Academy was rarely indicated. In 1866 the Academy once more became an active scientific organization.

Presidents

1799–1817	Timothy Dwight
1817–1836	Jeremiah Day
1836–1847	Benjamin Silliman
1847	James Murdock
1848–1849	Denison Olmsted
1850–1851	Eli Blake
1852–1856	Eleazar T. Fitch
1857–1858	James D. Dana.
1859–1880	C. S. Lyman

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See below for Dates of Publication of the Parts.

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(2) pref. p. 46–53 Brewer, William Henry. The debt of the century to learned societies.

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  pt. 1, 1810
    2, 1811
    3, 1813
    4, 1816

Papers on Natural History

1800 Dwight, Nathaniel. An account of the American cantharis or Melöe Americae. M. v. 1, pt. 1, p. 99–102.

Written Sept. 9, 1800.

1806 SILLIMAN, Benjamin. Sketch of the mineralogy of the town of New Haven, an answer to the fifth question of the . . . Academy. M. v. 1, pt. 1, p. 83–96.

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EAST INDIA MARINE SOCIETY, SALEM, MASS. (1799)

History

"The East India Marine Society was founded in 1799, and incorporated in 1801. It was originally instituted for the purpose of investigating and recording facts relative to the natural and physical history of the ocean. No one can be eligible as a member, unless he shall have actually navigated the seas near the Cape of Good Hope, or Cape Horn, either as master or supercargo. . . . A museum of several thousand specimens in natural history has been formed. . . . Its President at the present time is Nathaniel Bowditch." From a notice in the American Journal of Science. v. 10, p. 369–70. February, 1826.

The Society is now the well-known Peabody Museum at Salem, Massachusetts.

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THE ELGIN BOTANIC GARDEN, NEW YORK CITY (1801)

History

"The establishment of a Botanic Garden in the United States, as a repository of the native plants of this country, and as subservient to the purposes of medicine, agriculture, and the arts, is doubtless an object of great importance. Impressed with the advantages to be derived from an institution of this nature, I have anxiously endeavored ever since my appointment to the Professorship of Botany and Materia Medica in Columbia College (1795), to accomplish its establishment. Disappointed, however, in my first applications to the legislature of this state, soliciting their assistance in so expensive and arduous an undertaking, I resolved to devote my own private funds to the prosecution of this object; trusting, that, when the nature of the institution should be better, and more generally known, and its utility fully ascertained, it would receive the patronage and support of the public."

"Accordingly, in the year 1801, I purchased of the Corporation of the City of New York, twenty acres of ground, situated on the Middle Road (now Fifth Avenue) between Bloomingdale and Kingsbridge (Forty-seventh to Fifty-first streets and from Fifth Ave., "westward to a line about one hundred feet east of Sixth Avenue"—opposite the present Cathedral), and distant from the city about three miles and a half. The view from the most elevated part is variegated and extensive, and the soil itself of that diversified nature, as to be particularly well adapted to the cultivation of a great variety of vegetable productions. The greater part of the ground is at present in a promising state of cultivation, arranged in a manner the best adapted to the different kinds of vegetables, and planted agreeably to the most approved style of ornamental gardening. Since that time, an extensive conservatory, for the more hardy, greenhouse plants, and two species of hot houses, for the preservation of those which require a greater degree of heat, the whole exhibiting a front of one hundred and eighty feet, have been erected. . . The whole establishment is surrounded by a belt of forest trees and shrubs, both native and exotic, and these again are enclosed by a stone wall, two and a half feet in thickness, and seven feet in height.''

''As it has always been the primary object of attention to collect and cultivate in this establishment, the native plants of this country, especially such as are possessed of medicinal properties, or are otherwise useful, such gardeners as were practically acquainted with our indigenous productions, have been employed.''

''Another object of importance is to afford students of medicine, the means of acquiring a knowledge of the natural history of plants, and the principles of botanic arrangements . . . For this purpose the grounds were divided into different compartments. . .''

''Since the publication of the first edition of this Catalogue (Hortus Elginensis), in 1806, this institution has been greatly improved, and by an Act of the Legislature, passed on the 12th day of March, 1810, has been purchased by the State for the benefit of the Medical Schools of New York (that at Columbia College and the College of Physicians and Surgeons—combined in 1814) . . .'' The above paragraphs are Extracts from David Hosack's ''Hortus Elginensis,'' 2d ed. Mar. 1811, pref. 5–6, 7, and gives the history of the institution up to 1811.

In 1806 he issued his first catalogue of the plants raised at the Garden. In 1811 he issued his ''Statement of facts . . .'' relative to the Garden, in which he dilates at length on his attempts to gain the active financial support of the New York State Legislature, and of the final sale of the Garden to the State, for the sum of $74,268.75, at a personal loss to Hosack of over $28,000.

By virtue of a bill passed March 12, 1810, the Garden became state property, and passed into its hands January 3, 1811. The Regents of the State into whose control the Garden was placed, gave the management of the institution to the College of Physicians and Surgeons. In 1811, the second edition of the ''Hortus Elginensis'' appeared.

Upon the merger of the two medical Colleges to form the present College of Physicians and Surgeons of Columbia University, in 1814, Columbia College took over the management, and for over a half century, (the Garden although a neglected scientific institution, dying prematurely), retained its interest in it at a great financial loss. Eventually when the city moved northward, the property was the chief source of the College's income. For detailed accounts of the subsequent history of the Garden particularly from

1811 to the final sale of the property, see the excellent article by Addison Brown, below.

Frederick Pursh, the well-known botanist, was in charge of the Garden for several years, and in 1810 was succeeded by Michael Dennison. Hosack's conduct of the Garden in the earlier years, was aided materially by the assistance he received from C. W. Eddy, Jr., J. W. Francis, Isaac Roosevelt, Robert M. Barclay, R. R. Livingston, John Stevens, Bernard M.'Mahon, Stephen Elliott, John Vaughan, John Le Conte, William Prince, Andrew Gentle and William Darlington, most of whom contributed important collections of American or foreign plants.

Dennison served through 1815, when the Garden was rented to Mr Gentle, a local seedsman. In 1823, J. B. Driver took over the Garden on a lease, and from that time onward, the property was gradually neglected until disposed of, as noted above.

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Excellent account of the Garden after its disposition to the State by Hosack.

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This is the 2d ed. of 1806, see above. The plate (front.) shows the Garden as it was in 1811. English index, p. 61–5. Contains 2,000 species. Preface dated March 12, 1811.

Rev. of Catalogue is in Med. Repos. (1797), v. 14 (3d hexade, v. 2), p. 373–79. April, 1811.

———. A statement of facts relative to the establishment and progress of the Elgin Botanic Garden, and the subsequent disposal of the same to the State of New York. New York, Printed by C. S. Van Winkle, 1811. 56 p.

Rev. in Med. Repos. (1797), v. 14 (3d hexade, v. 2), p. 373–79. April, 1811.

Preface to ''Statement'' written Mar. 12, 1811.

THE YALE COLLEGE MINERALOGICAL CABINET, NEW HAVEN (1802)

History

''The study of science at Yale may be considered as having had its beginning in 1802, when Benjamin Silliman was appointed professor of Chemistry and Mineralogy in the College . . . Soon after the appointment of Professor Silliman, Colonel George Gibbs of Rhode Island, for many years a resident in Europe, returned from his travels with a collection of minerals, described as being at that time the most extensive and valuable ever brought to this country. Professor Silliman visited Col. Gibbs, spending much time with him in studying the collection, with the result that Col. Gibbs made the generous and unexpected proposition to open his Cabinet at Yale College, provided rooms should be fitted up for its reception . . .

''To this proposition prompt response was made by the authorities of the College, and in 1810, 1811, and 1812, the collection was arranged and placed at the disposition of the public under the personal supervision of Col. Gibbs. In 1825, the collection was offered for sale, preference being given to Yale as purchaser. Mainly through the influence of Professor Silliman, the necessary funds ($20,000) were secured and the collection became the property of the College, serving as the nucleus of the present Yale College collection.

''Another factor which has had undoubtedly a great influence upon the development of mineralogy at Yale, was the founding, in

1818, of the American Journal of Science (1818), q.v., at New Haven, by Prof. Silliman. Most American contributions to mineralogy have appeared in the pages of this Journal . . .

"In 1846, Benjamin Silliman, Jr., was appointed to the professorship of Applied Chemistry . . . In 1850, James Dwight Dana was appointed to the Silliman professorship of Geology, and in 1864, of Mineralogy, was added to the title . . . In 1855, a professorship of Metallurgy was founded in the Sheffield Scientific School, and George Brush was appointed to fill the chair . . . While a student at Yale, Prof. Brush became interested in making a collection of minerals, and during a period of fifty years, has gathered a collection of over 15,000 specimens . . ." PENFIELD, S. L. 1901. p. 3–9. (See Bibliography, below).

Notices of the Gibbs Cabinet and its purchase for Yale, may be found in the Amer. J. Sc. v. 1, p. 6, July, 1818; and in v. 25, p. 215, Oct. 1833.

Bibliography

1879 DANA, Edward Salisbury. The Mineralogical Department. (In Kingsley, W. L., ed. History of Yale College. v. 2, p. 183–86. 1879)

1901 PENFIELD, Samuel L[ewis]. History of the Mineralogical Department and of the development of mineralogy at Yale. N. Y., 1901. (In Penfield, S. L., & Pirrson, L. V. Contributions to mineralogy and petrography from the laboratories of the Sheffield Scientific School of Yale University. p. 3–30)

The Yale Bicentennial Publications. Bibliography, p. 9–30.

SIBLEY'S EXPLORATION OF THE RED RIVER (1803)

History

At the request of the Secretary of War, General Henry Dearborn, John Sibley gave an account of his exploration of the Red River from its mouth to about 70–80 miles above Natchitoches, during 1803, from March to June, being by the course of the river 400 miles.

It was published in 1806 in President Jefferson's "Message" along with accounts of the activities of William Dunbar and Lewis and Clark.

See also for an account of Sibley and his work, DUNN, Milton. History of Natchitoches, Louisiana. (In Louisiana Hist. Quart. v. 3, p. 26–56. Jan. 1920)

Bibliography

(1) Washington ed.

1806 [JEFFERSON, Thomas]. Message from the President of the United States communicating Discoveries made in exploring the Missouri, Red River and Washita, by Captains Lewis and Clark, Doctor Sibley and Mr Dunbar, with a statistical account of the countries adjacent . . . Feb. 19, 1806 . . . printed by order of the Senate. City of Washington, A. & G. Way, printers, 1806. [178] p.

There is another ed. N. Y. Hopkins & Seymour, 1806. 178 p. similar to the above. These ed. were rev. in Med. Repos. (1797), v. 10 (2d hexade, v. 4), p. 163–74. Oct. 1806. Also repr. (In Amer. State Papers. Wash. 1832. v. 4 (Military affairs). Doc. no. 113. p. 705–43).

(2) Natchez ed.

————. Discoveries made in exploring the Missouri, Red River and Washita, by Captains Lewis and Clark, Doctor Sibley, and William Dunbar, Esq. with a statistical account of the countries adjacent; with an appendix by Mr Dunbar. Natchez, Printed by Andrew Marschalk, 1806. 177 p.

Very full collations for this and the above editions are given in PALTSITS, V. H. Bibliographical data. (In THWAITES, R. G. ed. Original journals of Lewis and Clark Expedition. N. Y. 1904. v. 1, pref. p. 63–5.)

Contents by SIBLEY

SIBLEY, John. Historical sketches of the several Indian tribes in Louisiana south of the Arkansa River and between the Mississippi and River Grand. p. [66]–86. (Wash. ed.)

p. [65]–83 Natchez ed. (Erratic paging, verso also p. 65.)
Written from Natchitoches, La., April 5, 1805. Contents by SIBLEY also repr. in (Amer. State Papers. Wash. 1832. v. 4 (Military affairs.) Doc. no. 113. p. 721–25)

————. Some account of the Red River. p. 87–115. (Wash. ed.)

p. 84–112. Natchez ed. Written April 10, 1805. Also in Amer. State Papers. v. 4 (Military affairs). p. 725–31.

DUNBAR'S EXPEDITION TO LOUISIANA (1804)

History

"Having been disappointed, after considerable preparation, in the purpose of sending an exploring party up that river [the Red], in the summer of one thousand eight hundred and four, it was thought best to employ the autumn of that year in procuring a knowledge of an interesting branch of the river called the Washita. This was undertaken under the direction of Mr Dunbar of Natchez, a citizen of distinguished science . . . He ascended the river to the remarkable hot springs near it, in latitude 34° 31′ 4″ north, longitude 92° 50′ 45″ west from Greenwich . . .'' President JEFFERSON in his ''Message'' . . . (see Bibliography below—1806)

Dr George Hunter accompanied Dunbar on this journey which lasted from October 16, 1804, to January 31, 1805. The MS was deposited with the American Philosophical Society, July 18, 1817; and with its permission was reprinted in 1904 (see below DOCUMENTS relating to the Louisiana Purchase).

President Jefferson's ''Message'' printed in 1806 was the first to contain accounts of the explorations carried on by Dunbar. The early Transactions of the American Philosophical Society (v. 6), contain many papers, chiefly meteorological and other observations of Dunbar's activities in Louisiana and the adjacent country, in Arkansas. Below are given the three chief editions of the ''Message,'' and their contents, as they relate to Dunbar's Explorations.

Bibliography

(1) Washington ed.

1806 [JEFFERSON, Thomas]. Message from the President of the United States communicating Discoveries made in exploring the Missouri, Red River and Washita, by Captains Lewis and Clark, Doctor Sibley and Mr Dunbar, with a statistical account of the countries adjacent . . . Feb. 19, 1806 . . . printed by order of the Senate. City of Washington, A. & G. Way, Printers, 1806. [178] p.

There is another ed. N. Y. Hopkins & Seymour, 1806. 178 p. similar to the above. These ed. were rev. in the Med. Repos. (1797), v. 10, (2d hexade, v. 4), p. 163–74. Oct. 1806. Also repr. in (Amer. State Papers. Wash. 1832. v. 4 (Military affairs). Doc. no. 113, p. 705–43)

(2) Natchez (Dunbar's) ed.

————. Discoveries made in exploring the Missouri, Red River and Washita, by Captains Lewis and Clark, Doctor Sibley, and William Dunbar, Esq. with a statistical account of the countries adjacent; with an appendix by Mr Dunbar. Natchez, Printed by Andrew Marschalk, 1806. 177 p.

The copy in the N. Y. Public Library is an autographed copy from Dunbar to a friend, Swift. Very full collations for this and the above editions are given in PALTSITS, V. H. Bibliographical data. (In THWAITES, R. G. ed. Original journals of Lewis and Clark Expedition. N. Y. 1904. v. 1, pref. p. 63–5)

Contents by DUNBAR

DUNBAR, William. Observations made in a voyage commencing at St. Catherine's landing, on the east bank of the Mississippi, proceeding downwards to the mouth of the Red River, and from thence ascending that river, as high as the Hot Springs in the proximity of the last mentioned river, extracted from the Journals of William Dunbar, esquire, and Doctor Hunter. p. 113–77 (Natchez ed.)

p. 116–78 (of Wash. ed.)

————. Vegetable productions of the Washita country: short lists of the most obvious vegetable productions of the Washita country, which are indigenous or growing without cultivation. p. 161–66 (Natchez ed.)

p. 170–71 (Wash. ed.)

(3) Original MS ed.

1904 DOCUMENTS relating to the purchase & exploration of Louisiana . . . printed from the original manuscripts in the library of the American Philosophical Society and by direction of the Society's Committee on Historical Documents. Boston & New York, Houghton, Mifflin & co., 1904. 45 + 189 + 76 p. port.

I. The limits and bounds of Louisiana by Thomas JEFFERSON. 45 p. port.

II. The Exploration of the Red, the Black and the Washita Rivers, by William DUNBAR 189 + 76 p. port.

Jefferson's article written January 15, 1804.

MS presented by Daniel Parker and Bishop White to the Amer. Phil. Soc. (1769), Proc. v. 22, appx. p. 472, gives the date as July 18, 1817.

Contents: of Pt. II.

DUNBAR, William. Journal of a voyage commencing at St. Catherine's landing. . . (same title as above in 1806 ed. q.v.). 189 p.

————. Journal of a geometrical survey . . . 76 p.

Article in Society Transactions

1804 DUNBAR, William. Description of the river Mississippi and its delta, with that of the adjacent parts of Louisiana.

Rd before Amer. Phil. Soc. (1769), April 6, 1804. In its Trans. v. 6, p. 165–87, 191–201. 1804–1809, (pt. 1–2)

LEWIS AND CLARK EXPEDITION (1804)

History

"In 1792, I proposed to the American Philosophical Society, that we should set on foot a subscription to engage some competent person to explore that region in the opposite direction; that is, by ascending the Missouri, crossing the Stony Mountains, and descending the nearest river to the Pacific. Captain Lewis, being then stationed at Charlottesville (Va.), on the recruiting service, warmly solicited me to obtain for him the execution of that object. I told him that it was proposed that the person engaged should be attended by a single companion only, to avoid exciting alarm, among the Indians. This did not deter him.; but Mr André Michaux, a professed botanist, author of the "Flora Boreali-Americana," and of the "Histoire des Chenes d'Amerique," offering his services, they were accepted. He received his instructions and when he had reached Kentucky in the prosecution of his journey, he was overtaken by order from the minister of France, then at Philadelphia, to relinquish the expedition, and to pursue elsewhere the Botanical enquiries on which he was employed by that government . . . and thus failed the second attempt for exploring that region."

"In 1803, the Act for establishing trading houses with the Indian tribes being about to expire, some modifications of it were recommended to Congress by a confidential message of January 18th, and an extension of its views to the Indians on the Missouri. In order to prepare the way, the message proposed the sending an exploring party to trace the Mississippi to its source, to cross the Highlands, and follow the best water communication which offered itself from thence to the Pacific Ocean. Congress approved the proposition, and voted a sum of money ($2,500) for carrying it into execution. Captain Lewis, who had then been near two years with me as private secretary, immediately renewed his solicitations to have direction of the party . . . To fill up the measure desired, he wanted nothing but a greater familiarity with the technical language of the natural sciences, and readiness in the astronomical observations necessary for the geography of his route. To acquire these, he repaired immediately to Philadelphia, and placed himself under the tutorage of the distinguished professors of that place, with a zeal and emulation, enkindled by an ardent devotion to science, communicated to him freely the information requisite for the purposes of the Journey . . .

"Deeming it necessary that he should have some person with him of known competence to the direction of the enterprise, in the event of accident to himself, he proposed William Clarke . . . who was approved, and with that view, received a commission of Captain. In April, 1803, a draft of his instructions was sent to Captain Lewis, and on the twentieth of June, was signed in the following form . . .'' President Thomas JEFFERSON in the Preface to the ALLEN-BIDDLE ed. (1814), of the History of the Lewis and Clark Expedition. Pref. p. 10–20 (Extracts), entitled: Life of Captain Lewis, (written Aug. 18, 1813).

Jefferson's instructions to Lewis contained the following items concerning the natural history of the country to be explored:

> "Among other objects worthy of notice will be . . . The soil and face of the country, its growth and vegetable productions, especially those not of the United States.
>
> The animals of the country generally, and especially those not known in the United States.
>
> The remains and accounts of any which may [be] deemed rare or extinct.
>
> The mineral productions of every kind, but more particularly metals, limestone, pit coal or saltpetre; salines and mineral waters, noting the temperature of the last, and such circumstances as may indicate their character.
>
> Volcanic appearances.
>
> Climate as characterized by the thermometer . . . the dates at which particular plants put forth or lose their flowers, or leaf, times of appearance of particular birds, reptiles, or insects . . ."

From Original MS in the Bureau of Rolls—Jefferson Papers, ser. 1, v. 9, doc. 269. Repr. in THWAITES' R. G. ed. Original Journals of the Lewis and Clark Expedition. v. 7, appx. no. 18, p. 249. 1905. (See below under editions of L & C. 1904—Thwaites). Complete instructions are given on p. 247–52.

''In pursuance of a measure proposed to Congress by a Message of January 18th, one thousand eight hundred and three, and sanctioned by their appropriation for carrying it into execution, Captain Meriwether Lewis, of the First Regiment of Infantry, was appointed, with a party of men to explore the River Missouri, from its mouth to its source, and crossing the Highlands by the shortest portage, to seek the best water communication thence to the Pacific Ocean; and Lieutenant Clarke was appointed second in command. They were to enter into conference with the Indian nations on their route, with a view to the establishment of commerce with them. They entered the Missouri, May fourteenth, one thousand eight hundred and four, and on the first of November took up their winter quarters near the Mandan towns, 1609 miles above the mouth of the river. . . . On the eighth of April, one thousand eight hundred and five, they proceeded up the river in pursuance of the objects prescribed to them. A letter of the preceding day, April seventh, from Captain Lewis, is herewith communicated . . .'' Extract from JEFFERSON's Message . . .'' delivered Feb. 19, 1806, to Congress, p. [3]–4 (both the Wash. & Natchez ed.)—see below under 1806. [see A].

The letter on p. 5–8 follows and in it Lewis informs Jefferson that . . .

> "Among other articles you will observe . . . 67 specimens of earths, salts and minerals, and 60 specimens of plants; these are accompanied by their respective labels, expressing the days when obtained, places where found, and virtues and qualities when known . . .".

Captain Lewis left Washington on the fifth of July, 1803, and proceeded to Pittsburgh. Captain Clark joined Lewis at Louisville, and in December, 1803, they settled for the winter at St. Louis.

On May 14, 1804, the Expedition left their encampment for their journey to the coast. The party returned to St. Louis in September, 1806, Captain Lewis reaching that city on the twenty-third, of that month.

Benjamin Smith Barton, one of the leading naturalists of the day was to have described the collections made by the party but illness prevented these plans being carried out.

On the Zoology of the Expedition

The following extracts concerning the Zoology of the expedition of Lewis and Clark are from the notes by Witmer Stone in the ORIGINAL JOURNALS, ed. by THWAITES, (see THWAITES ed. below), v. 6, pt. 2, p. 121.

> "At the time of Lewis and Clark's expedition, practically nothing was known of the zoology of the United States west of the Mississippi River, consequently the opportunities for valuable discoveries in this field by members of the party were exceptional. Unfortunately there seems to have been no systematic zoologist among those who made up the expedition, and consequently no new species of animals were named in the Report.
>
> The authors did, however, include in their narrative good descriptions of such of the mammals and birds as especially attracted their attention, and subsequent naturalists have established proper technical names upon these descriptions. . . .
>
> Of more interest than their descriptions, however, are the actual specimens brought back by the explorers. These were by no means numerous, and were all deposited in the then famous repository for natural history curiosities, Peale's Museum, Philadelphia (1784), (see Amer. Phil. Soc.

Los Angeles Museum
Exposition Park

(1769)–History). They were mounted by Peale, and submitted to the famous ornithologist, Alexander Wilson—who was then publishing his great work on North American birds—in order that plates and descriptions of the novelties might appear therein. . . . With the decline and disintegration of Peale's Museum, the ornithological specimens were scattered; but recently (1904) some of them appeared in Boston, and found their way into the possession of Clarence J. Maynard . . . among them, Mr. Maynard informs me, is a specimen of Lewis's woodpecker, without much doubt the original specimen, and probably the only one of this historic collection that is still extant. . . ."

On the Botany of the Expedition

Extracts from the notes in the ORIGINAL JOURNALS, pub. by THWAITES, in his 1904 ed., by Stewardson Brown and William Trelease, concerning the botany of the expedition, v. 6, pt. 2, p. 151–53.

"The importance of the Lewis and Clark expedition to American botany may be appreciated when we consider what a large proportion of plants brought back by the pioneers were of species then unknown to science. The work of identifying the material appears to have been entrusted to Frederick Pursh, a young botanist, who at the time of the return of the expedition, was in Philadelphia. . . . In 1814, Pursh published in London the first edition of his 'Florae Americae Septentrionalis,' two octavo volumes, of 725 pages of text and 24 plates, which contained descriptions of the plants under consideration. Speaking of these in the preface of his work, after a brief reference to his having made the acquaintance of Meriwether Lewis, Pursh says:

" 'A small but highly interesting collection of dried plants was put in my hands by this gentleman in order to describe and figure those new, for the purpose of inserting them in the account of his "Travels" which he was then engaged in preparing for the press. . . . The collection of plants just spoken of was made during the rapid return of the expedition from the Pacific Ocean to the United States. A much more extensive one, made on the slow ascent toward the Rocky Mountains, and the chain of the Northern Andes, had unfortunately been lost, by being deposited among other things, at the foot of the mountains. The loss of this collection is the more to be regretted when I consider that the small collection communicated to me, consisting of about one hundred and fifty-five specimens, contained not above a dozen plants known to me to be natives of North America.—the rest being either entirely new or little known, and among them at least six distinct and new genera. This may give an idea of the discerning eye of the collector, who had but little knowledge of the Flora of North America. . . . The descriptions of these plants so far as the specimens were perfect I have inserted in the present work, in their respective places, distinguishing them by the words "v. s. in Herb. Lewis." '

"Here he refers in his descriptions to 123 species which he ascribes as above, the majority of which he considered to be new to science. . . .

"The collection as preserved in the Herbarium of the Academy of Natural Sciences today, consists of specimens of 173 recognizable species, mostly in fair condition; these include 55 of Pursh's types recognized as species at the present time, with 38 additional ones, now for various reasons not considered tenable. The number lacks but fifteen of the species referred to by Pursh as contained in the Lewis Herbarium; of these some may be included among the existing specimens, but if so, are not recognizable from their descriptions."

Summary of the Lewis & Clark Expedition

(A) Jefferson's Message—1806.
(B) Gass's Journal—1807.
(C) Editions of the History of the Lewis and Clark Expedition. (The most important have been selected & analyzed.)
    (1) Allen—Biddle—Original ed.—1814.
    (2) London ed.—1814.
    (3) McVickar ed. 1842.
    (4) Coues ed., 1893.
    (5) Hosmer ed. 1902.
    (6) New Amsterdam Book Co., ed. 1902.
    (7) Thwaites ed.—The Original Journals of Lewis & Clark, 1904.
    (8) McMaster ed. 1905.
(D) Bibliography of Bibliography.
(E) Bibliography (General).

(A) Jefferson's Message

(1) Washington ed.

1806 [JEFFERSON, Thomas]. Message from the President of the United States communicating Discoveries made in exploring the Missouri, Red River and Washita, by Captains Lewis and Clark, Doctor Sibley and Mr Dunbar, with a statistical account of the countries adjacent . . . Feb. 19, 1806 . . . printed by order of the Senate. City of Washington, A. & G. Way, printers, 1806. [178] p.

There is also a N. Y. Hopkins & Seymour ed., 1806. 178 p. similar to the above.

Also repr. (In Amer. State Papers. Wash. Gales & Seaton, 1832. v. 4 (Military affairs). p. 705–43) Doc. no. 113.

These ed. were rev. in Med. Repos. (1797), v. 10 (2d hexade, v. 4), p. 163–74. Oct. 1806.

See note in the following entry.

(2) Natchez ed.

———. Discoveries made in exploring the Missouri, Red River and Washita, by Captains Lewis and Clark, Doctor Sibley, and William Dunbar, Esq., with a statistical account of the countries adjacent; with an appendix by Dr Dunbar. Natchez, Printed by Andrew Marschalk, 1806. 177 p.

See notes above in the preceding entry. This ed. was printed for Mr. Dunbar in his native city. Very full collations for the various editions are given in PALTSITS, V. H. Bibliographical data. (In THWAITES, R. G. ed. Original journals of the Lewis and Clark Expedition. N. Y. 1904. v. 1, pref. p. 63–5).
See Bibliography of Bibliography below (D) under PALTSITS, 1904.

(*B*) *GASS'S Journal*

(1) (Original Pittsburgh ed.)

1807 GASS, Patrick. A Journal of the voyages and travels of a corps of discovery, under the command of Capt. Lewis and Capt. Clarke of the Army of the United States, from the mouth of the river Missouri through the interior parts of North America to the Pacific Ocean, during the years 1804, 1805, & 1806. Containing an authentic relation of the most interesting transactions during the expedition.—a description of the country, and an account of its inhabitants, soil, climate, curiosities and vegetable and animal productions, by Patrick Gass, one of the persons employed on the expedition with geographical and explanatory note by the publisher. Pittsburgh, Printed by Zadok Cramer, for David M'Keehan, publisher and proprietor, 1807. 8 + 9–262 p. illus.

In diary form.
2d ed. Phila. Matthew Carey, 1810. 262 p.
3d ed. 1811.

(2) HOSMER'S ed.

1904 HOSMER, James Kendall, ed. Gass's Journal of the Lewis and Clark Expedition by Seargeant Patrick Gass one of the persons employed in the expedition; reprinted from the edition of 1811, with facsimilies of the original title-page and the five original illustrations, a reproduction of a rare portrait of Gass, and a map of the Lewis and Clarke route; with an analytical index, and an introduction by James Kendall Hosmer. . . . Chicago, A. C. McClurg & co., 1904. 53 + 298 p. illus. pl. port. map.

(*C*) *Editions of the History of the Lewis and Clark Expedition*

(1) ALLEN–BIDDLE ed.

The Original and only Authorized ed.

1814 ALLEN, Paul, and [BIDDLE, Nicholas]. History of the expedition under the command of Captains Lewis and Clark, to the sources of the Missouri, thence across the Rocky Mountains and down the River Columbia to the Pacific Ocean, performed during the years 1804–5–6 by order of the government of the United States; prepared for the press by Paul Allen, Esquire. Philadeplhia, Bradford and Inskeep; New York, Abm. H. Inskeep, J. Maxwell, printer, 1814. 2 v. maps.

This is the well known Biddle-Allen text. To Biddle was assigned the task of writing the narrative of the Expedition, after the premature decease of Lewis in 1809. But owing to the pressure of business and other matters, he entrusted at the last moment the manuscript to Paul Allen, for its preparation for the press.

v. 1 28 + 470 p. maps.
v. 2 9 + 522 p. maps.

Contents:

v. 1 ch. 1–17.
v. 2 ch. 1–19, appx.

LEWIS, M. A general description of the beasts, birds, plants, etc., found by the party in this expedition. v. 2, ch. 7, p. 148–201.

————. Observations and reflections on the present and future state of Upper Lousiana in relation to the government of the Indian nations inhabiting that country, and the trade and intercourse with the same. appx. v. 2, p. [435]–61.

————. A summary statement of the rivers, creeks, etc., . . . 1804–6. v. 2, p. 462–70.

————. Estimate of the western Indians. v. 2, appx. p. 471–76.

————. Thermometrical observations. v. 2, appx. p. 476–95.

————. Remarks and reflections. . . . v. 2, appx. p. 495–522.

Arranged chronologically from Jan. 1, 1804 to Aug. 22, 1806.

(2) LONDON ed.

1814 LEWIS, Meriwether, and CLARK, William. Travels to the source of the Missouri River and across the American continent to the Pacific Ocean performed by order of the government of the United States in the years 1804, 1805, and 1806, by Captains Lewis and Clarke, published from the official report, and illustrated by a map of the route, and other maps. London, Longman, Hurst, Rees, Orme & Brown, 1814. 24 + 663 p. maps. 4.°

(3) McVICKAR ed.

1842 McVICKAR, Archibald, ed. History of the expedition under the command of Captains Lewis and Clarke, to the sources of the Missouri, thence across the Rocky Mountains and down the river

Columbia to the Pacific Ocean: performed during the years 1804, 1805, 1806, by order of the government of the United States, prepared for the press by Paul Allen, Esq., revised, and abridged by the omission of unimportant details, with an introduction and notes, by Archibald McVickar. New York, Harper, March, 1842. 2 v. maps. 18.°

COUES says of this ed. which was repr. between 1842 & 1875 some 16 times: "The natural history chapter, besides being relegated to an appendix, is transposed as to its botanical and zoological portions, the botany coming first in the original, the zoology in the present edition; it is furthermore, like the rest of the work, abridged at the editor's discretion, the omissions being indicated by asterisks; a new feature, moreover is introduced, being foot-note references to the pages of the body of the work on which the various species were before mentioned. This is a valuable set of cross-references, for the narrative accounts scattered throughout the work are often no less important than the formal notices themselves." From COUES, Elliott. . . . Bibliography of publications of Lewis & Clark travels. (In U. S. Geol. & Geogr. Surv. Territ. Bull. v. 1, ser. 2, no. 6, p. 429. Feb. 8, 1876). See COUES under Bibliography of Bibliography below. (D)

Contents of McVickar ed.

v. 1 p. 5–51, 53–371, 3 maps.
Contains Introduction & ch. 1–16.
v. 2 9 p. + p. 11–395, 3 maps.
Contains ch. 1–19 & Appx.
Natural History, appx. p. 339–78.

(4) COUES ed.

1893 COUES, Elliott, ed. History of the expedition under the command of Lewis and Clark, to the sources of the Missouri River, thence across the Rocky Mountains and down the Columbia River to the Pacific Ocean, performed during the years 1804–5–6, by order of the government of the United States; a new edition, faithfully reprinted from the only authorized edition of 1814, with copious critical commentary, prepared upon examination of unpublished official archives and many other sources of information including a diligent study of the original manuscript journals and field note-books of the explorers, together with a new biographical and bibliographical introduction, new maps, and other illustrations, and a complete index, by Elliott Coues. . . . New York, Francis P. Harper, 1893. 4 v. pl. maps, tab. facsim.

Contents

v. 1 132 + p. [1]–352. 2 facsim. port.
Contains:
Preface, dated June 30, 1893; pref. p. 5–10.
Preface to Original ed. pref. p. 13–4.

Memoir of Meriwether Lewis, pref. p. 15–62.
Memoir of William Clark; pref. p. 63–97.
Memoir of Patrick Gass; pref. p. 99–106.
Bibliographical introduction; pref. p. 107–32.
History of the expedition, ch. 1–19; p. [1]–352.

v. 2 6 p. + p. 353–820 1 port.
. . . ch. 10–24, p. 353–820.

v. 3 6 p. + p. 821–1298.
. . . ch. 25–27 & appx. 1–4.
Botany, ch. 25, pt. 1, p. 821–39.
Zoology, ch. 25, pt. 2, p. 839–900.

v. 4 5 p. + p. 1299–1364, illus., pl. maps.
. . . Index & the illus. maps, etc.

(5) HOSMER ed.

1902 HOSMER, James Kendall, ed. History of the expedition of Captains Lewis and Clark, 1804–5–6; reprinted from the edition of 1814, with introduction and index by James K. Hosmer. . . . Chicago, A. C. McClurg, 1902. 2 v. port. maps, plan, facsim.

Preface dated. Sept. 1, 1902.

Contents:

v. 1 56 + [2] + 500 p.
v. 2 [13] + 583 p.

(6) NEW AMSTERDAM BOOK COMPANY ed.

1902 [LEWIS, Meriwether, and CLARK, William]. History of the expedition under the command of Captains Lewis and Clark to the sources of the Missouri, across the Rocky Mountains, down the Columbia River to the Pacific in 1804–6; a reprint of the edition of 1814 to which all members of the expedition contributed, with maps, in three volumes. New York, New Amsterdam Book Company, 1902. 3 v. port. maps.

Contents:

v. 1 5–27 p. + p. 29–33, + 35–416, ch. 1–12.
v. 2 9 p. + p. 11–410, ch. 13–24.
Natural history: ch. 24, p. 348–410.
v. 3 11 p. + p. 13–382, ch. 25–36 & Appx.
There are only 210 copies of this ed.

(7) THWAITES ed., (Original Journals).

1904 THWAITES, Reuben Gold, ed. Original journals of the Lewis and Clark expedition 1804–1806, printed from the original manuscripts in the library of the American Philosophical Society and by direction of its committee on historical documents together with manuscript material of Lewis and Clark from other sources, including note-books, letters, maps, etc., and the Journals of Charles

Floyd and Joseph Whitehouse; now for the first time published in full and exactly as written, edited, with introduction, notes, and index, by Reuben Gold Thwaites. . . . New York, Dodd, Mead & co., 1904–5. 8 v. pl. port. maps, atlas (v. 8). 4.°

Now the classic text.

Contents

v. 1 pub. July, 1904 93 + 374 p.
  Introduction—Preface, p. [17]–60.
    Written May 14, 1904.
    Previous explorations, pref. p. [17]–23.
    Meriwether Lewis, pref. p. 24–6.
    William Clark, p. 27–30 (pref.).
    The Expedition, pref. p. 30–3.
    The story of Lewis & Clark's Journals, pref. p. 34–58.
  Bibliographical data, by Victor Hugo PALTSITS, pref. p. [61]–93.
  The original journals of Captains Meriwether Lewis and William Clark. The Journals proper.
    ch. 1–8, pt. 1. p. [1]–374.
    Jan. 30, 1804–May 5, 1805.

v. 2 pub. Nov. 1904 9 + 386 p.
  Journals and orderly book of Lewis and Clark, from Two-thousand Mile Creek to Shoshoni Camp on Lemhi River: May 6, 1805–August 20, 1805.

v. 3 pub. Jan. 1905 10 + 363 p.
  Journals and orderly book of Lewis and Clark, from the Shoshoni Camp on Lemhi River to Fort Clatsop: August 21, 1805–January 20, 1806.

v. 4 pub. Feb. 1905 10 + 372 p.
  Journals and orderly book of Lewis and Clark, from Fort Clatsop to Musquetoe Creek: January 21–May 7, 1806.

v. 5 pub. Mar. 1905 9 + 395 p.
  Journals of Lewis and Clark, from Musquetoe Creek to St. Louis: May 8–September 26, 1806.

v. 6 pub. July, 1905 9 + 280 p.
  Scientific data—accompanying the Journals of Lewis and Clark.

Contents

1. Geography	p. 3–79
2. Ethnology	p. 80–120
3. Zoology Note by Witmer Stone.	p. 121–36
4. Botany Notes by William Trelease and Stewardson Brown.	p. 137–58
5. Mineralogy Note by Erwin H. Barbour	p. 159–64

6. Meterology	p. 165–229
7. Astronomy	p. 230–65
8. Miscellaneous memoranda	p. 266–80

v. 7 pub. Sept. 1905 13 + 534 p.

The original Journal of Sergeant Charles Floyd.
ch. 1–2. p. [1]–26.
May 14–August 18, 1804.

The original Journal of Private Joseph Whitehouse.
ch. 3–17. p. [27]–190.
May 14, 1804–November 6, 1805.

Appendix to the Original Journals of the Lewis and Clark Expedition: p. [191]–423.

Contains 87 chapters relating principally to the correspondence relative to the expedition, from 1783–seq., with numerous letters of Jefferson, Lewis, Clark, etc., throwing great light on the origin, progress, and support of the expedition, collected from various sources

v. 8 ATLAS accompanying the Original Journals of the Lewis and Clark Expedition 1804–1806 being facsimile reproductions of maps, chiefly by William Clark, illustrating the route of the expedition, with sites of camping places and Indian villages, besides much miscellaneous data now for the first time published, from the original manuscripts in the possession of Mrs. Julia Clark Voorhis and Miss Eleanor Glasgow Voorhis; together with a modern map of the route prepared especially for this volume.

(8) McMASTER ed.

1905 McMASTER, John Bach, ed. History of the Expedition under the command of Captains Lewis and Clark to the sources of the Missouri, thence across the Rocky Mountains and down the River Columbia to the Pacific Ocean performed during the years 1804–5–6, by order of the government of the United States; a complete reprint of the Biddle edition of 1814, to which all the members of the expedition contributed; with an account of the Louisiana Purchase by Prof. John Bach McMaster and notes upon the route with illustrations, and maps. London, David Nutt, 1905. 3 v. illus. maps.

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v. 1 22 + p. 5–33, 35–416, ch. 1–12.
v. 2 8 + p. 3–9, 11–410, ch. 13–24.
v. 3 8 + p. 3–11, 13–382 p., ch. 25–36 & Appx.

(D) Bibliography of Bibliography

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2 Zoological: p. 430–34.

Considers fully the pirated, spurious, stolen editions, translations, etc. Changes and corrections may be found in his Bibliographical Introduction to his 1893 edition of the Lewis & Clark Expedition. See following entry.

1893 ————. Bibliographical introduction. (In his History of the expedition under the command of Lewis and Clark. N. Y. 1893. v. 1, preface. p. 107–32).

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Very full collation of the various editions of the Lewis and Clark Expedition to 1904.

(E) Bibliography

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Continuously paged. v. 1, 36 + 358 p.; v. 2, p. 359–751. 2d ed. Lond. 1816.

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v. 2 15 + 419 p.

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1906 LYMAN, Horace S[umner]. The Lewis and Clark Expedition. (In Amer. Hist. Mag. v. 1, no. 4 & 5. p. 329–66, 439–56. July & Sept. 1906)

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1) Historical introduction. p. [11]–28.
2) Captain Lewis' Journal: from Aug. 30–Dec. 8, 1803. ch. 1–2, p. [29]–76.
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4) Index. p. [403]–44.

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NEW YORK HISTORICAL SOCIETY, NEW YORK CITY (1804)

History

The first meeting for the formation of the New York Historical Society was held in New York City, on the twentieth of November, 1804. It was instituted on the tenth of December, 1804; and incorporated on the tenth of February, 1809.

''The object of the Society shall be to discover, procure and preserve whatever may relate to the natural, civil, literary, and ecclesiastical history of the United States in general, and of this state in particular.'' From the Constitution, N. Y. 1805; or its Coll. v. 1, p. 1, 1811.

''The Cabinet of natural history belonging to this Society was first established in 1816. At that time no other public institution existed in the city for the collection and classification of the objects of this department of knowledge, or for obtaining the mineralogical and other productions of the United States. Since that period, the

Lyceum of Natural History (See N. Y. Lyc. Nat. Hist. (1817),), has been organized; and under the auspices of its learned and efficient president [S. L. Mitchill] supported by the zeal of its young and active members, has acquired character and reputation, and promises to be eminently useful in the cultivation of this branch of science."

"Under these circumstances, it merits our consideration how far the benefit that was contemplated by the Historical Society, in the erection of this department of natural history, will not be more essentially and completely accomplished by the Lyceum, and whether the proposed transfer of the Cabinet will not prevent collision in our labor, and by concentrating the objects in view promote the interests of science and advance the respectability of the institution." The above extracts are from an Inaugural Address delivered in February, 1820, by the president, David HOSACK. (In N. Y. Hist. Soc. Coll. v. 3, p. 278–79. 1821)

Among its most active members in the department of natural history were S. L. Mitchill, Col. George Gibbs, David Hosack, John Pintard, De Witt Clinton and Archibald Bruce.

"On February 11, 1817, a series of lectures was established on zoology, geology, vegetable physiology, mineralogy, chemistry and philosophy. . . . In 1829, the collection of minerals and the specimens of natural history were presented to the Lyceum of Natural History." From KELBY, p. 32 (see Bibliography below).

De Witt Clinton was president of the Society from 1817 to 1819; and David Hosack from 1820 to 1827. An account of the Cabinet of Natural History belonging to the Society may be found in the MEDICAL REPOSITORY, v. 19, (n. s. v. 4), 1818, p. 96–7.

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1805 NEW YORK HISTORICAL SOCIETY. Constitution and by-laws. N. Y., 1805. 15 p.

1905 KELBY, Robert Hendre. The New York Historical Society 1804–1904. N. Y. Pub. for the Society, 1905. 160 p.
Bibliography, p. 130–60.

Proceedings (Biglow)

Notice of the Proceedings of the Society, especially in the natural history department, for the years 1817–1819, may be found in the American Monthly Magazine & Critical Review; ed. by Biglow (called BIGLOW, in the Papers below), as follows:

For 1817 in v. 1, p. 44–8, 123–25, 193–94, 286–88, 374–76. May–Oct. 1817.
in v. 2, p. 55–6. Nov. 1817.
1818 in v. 3, p. 458–59, Oct. 1818, &
in v. 4, p. 293. Feb. 1819.

Collections (Coll.)

v. 1 for 1809 pub. 1811.
2 " 1810–14 " 1814.
3 " 1815–21 " 1821.

Papers on Natural History

1809 MITCHILL, S. L. . . . On certain fishes of the Hudson. . . . (In Coll. v. 1, appx. p. 41–3)

Appended to Samuel Miller's "Discourse" delivered in 1809. Mitchill's notes were written March 4, 1810.

Repr. in Med. Repos. (1797), v. 17, (n. s. v. 2), no. 3, p. 289–94. Oct. 1814.

1813 ———. A discourse delivered before the New York Historical Society, at their anniversary meeting, December 6, 1813, embracing a concise and comprehensive account of the writings which illustrate the botanical history of North and South America. Coll. v. 2, p. 149–215. Rd Dec. 6.

History of Amer. botany 16th century, p. 161–65. 17th century, p. 165–74; 18th century, p. 174–209; 19th, p. 209–15.

1817 ———. Report on zoology, pursuant to a resolve of the . . . Society, on the 11th of March, 1817. Biglow, v. 1, no. 1, p. 45–6. Pub. in May.

Reported on the means of promoting of that department of natural science.

See also for Circular of the Dept., Biglow, v. 1, no. 2, p. 123–24. June, 1817. Rd May 6. Also a Broadside, 2 p. 4°.

HOSACK, David. Report on botany and vegetable physiology. Biglow, v. 1, no. 1, p. 46–8. Rd April 8.

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GIBBS, George. Report on mineralogy. . . . Biglow, v. 1, no. 1, p. 47. Rd April 8.

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1817 HOSACK, David. Directions to be observed in collecting and preserving plants. Biglow, v. 1, no. 2, p. 124–25. Pub. in June.
MITCHILL, S. L. Presentation of Dr Samuel Bard's collection of Scotch plants. Biglow, v. 1, no. 4, p. 287. Pub. in Aug.

BOGERT, J. G. Presentation of a collection in mineralogy and conchology. Biglow, v. 1, no. 4, p. 287–88.

GARDEN, Alexander. . . . Memoir on the fascinating power of serpents. . . . Biglow, v. 2, no. 1, p. 55–6. Nov. 1817. Rd Sept. 9.

1818 MITCHILL, S. L. . . . On the receipt of four score fish, from Samuel G. Mott. . . . Biglow, v. 3, no. 6, p. 458–59. Oct. 1818. Rd Sept. 8.

A collection prepared by S. G. MOTT, but presented by his brother J. G. MOTT.

PHILADELPHIA MEDICAL AND PHYSICAL JOURNAL
(1804)

History

The PHILADELPHIA MEDICAL AND PHYSICAL JOURNAL, edited by one of the leading naturalists of the day, Benjamin Smith Barton, made its first appearance in November, 1804. In a ''General plan of the Work'' issued July 8, 1804, Barton outlined the aims of the periodical:

> 1) The work will contain: 1) Original communications relative to all the branches of medicine, natural history, and physical geography; 2) Biographical sketches of the lives of eminent physicians and naturalists, especially those of the last half of the eighteenth century, and of the present time; 3) Reviews of, or extracts from, new publications in medicine, natural history, and geography, especially those which have been published in the United States, or which have a particular reference to this tract of the country. . . . 4) Miscellaneous facts, of various kinds, all, however, relating to the expressed objects of the work." (From v. 1, pref. p. 5–7.)

The Journal appeared every six months for the three years of its existence, and in addition three supplements were published during the course of its life. The Supplement was intended especially to treat of natural history.

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1804 (The) PHILADELPHIA MEDICAL AND PHYSICAL JOURNAL; collected and arranged by Benjamin Smith Barton. . . . Philadelphia, John Conrad & co., 1804–9. 3 v. & 3 suppl.

Papers on Natural History

1804 v. 1, pt. 1, Nov. 13. 10 + 8 + 184 p.

Sect. 1

[Mitchill, S. L.], and Stevens, J. W. Description of the falls of Niagara; extracted from the Journal of a gentleman who visited them a few years since. . . . art. 13, p. 39–47.

Note by Stevens, written Sept. 1801.

Reichel, Charles. Some particulars concerning the locust of North America. art. 15, p. 52–6.

Written Aug. 2, 1793, at Nazareth, Pa. Note by Barton, p. 55–6

Bartram, John. Additional observations on the Cicada septendecim. . . . art. 16, p. 56–9.

Barton, B. S. Memorandums concerning the earthquakes of (North) America. art. 17, p. 60–7.

Barnwell, William. Observations on the power of habit in vegetables. art. 18, p. 67–75.

Heckwelder, John, Green, Daniel, and Barton, B. S. Notice of the travels of a Mohawk-Indian. art. 19, p. 75–7.

On the natural history of the country several hundred miles beyond Detroit.

Barton, B. S. Facts relative to the food of the humming bird. art. 24, p. 88–9.

Bartram, William. Anecdotes of an American crow. art. 25, p. 89–95.

Boyd, James, and Barton, B. S. Extracts from a MS journal (1785). . . . art. 26, p. 95–102.

Remarks by Barton, p. 99–102.

Ellicott, Andrew. On the digestive power of the pike (Esox). . . . art. 27, p. 102–3.

Written Nov. 30, 1795.

Wright, Mrs. S. Directions for the management of silk-worms. art. 28, p. 103–7.

Sect. 2

Bartram, William. Some account of the late Mr John Bartram, of Pennsylvania. p. 115–24.

Sect. 3

Barton, B. S. Miscellanous facts and observations in natural history. no. 29–48. p. 152–73.

1805 v. 1, pt. 2, May. 7 + 192 p.

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————. Some account of the different species and varieties of native American, or Indian dogs. art. 1, p. [3]–31.

————. On a species of North American wandering mouse. art. 2, p. 31–2.

Walmsley, Thomas. . . . On the Tilia Americana. . . . art. 4, p. 34–7.

Robertson, Felix. Additional observations on the Falls of Niagara, and particularly on their supposed original position. . . . art. 9, p. 61–8.

Rittenhouse, David. Experiments on the Gymnotus electricus, or electrical eel, made at Philadelphia . . . about the year 1770. . . . art. 15 & 24, p. 96–100, 159–61.

Bartram, William. Description of an American species of Certhia or creeper. art. 17, p. 103–6.

Barton, B. S. Facts relative to the torpid state of the North American alligator. art. 18, p. 106–9.

Walmsley, W. M. Observations relative to the wheat-moth of Pennsylvania, and other parts of the United States. art. 20, p. 119–26.

Barton, B. S. Observations on insects. art. 20, p. 127–31.

Bartram, William. Conjectures relative to the scite of Bristol, in Pennsylvania. art. 21, p. 131–33.

Green, Ashabel. Notices of the sulphur, sweet, and other mineral springs, in the western parts of Virginia . . . from a MS journal . . . 1800. art. 24, p. 148–59.

Heckwelder, John. Indian account of a remarkably strong and ferocious beast which (they say) existed in the northern parts of the state of New York about two hundred years ago. . . . art. 26, p. 161–65.

Barton, B. S. Notice of the sulphur springs, in the county of Ontario, N. Y., in a letter to President Jefferson. . . . art. 27, p. 166–68. Written Dec. 30, 1803.

1805 v. 2, pt. 1, Nov. 27. 12 + 208 p.

Sect. 1

Madison, [James]. Observations on the Mammoth, or American elephant. . . . art. 7, p. 58–62.

————. Notices of the warm springs in the county of Bath, in Virginia. art. 8, p. 62–5.

Barton, B. S. Note on the natural history of the substance called guano. art. 9, p. 66–8.

Vaughan, John, and Milligan, Robert. Facts and observations relative to the North American woodchuck. art. 10, p. 68–9.

Barton, B. S. Some account of the Tayè, a species of sheep. art. 18, p. 106–13, pl.

————. Character of the elk. art. 19, p. 113–17.

Gray, Isaac, and Rittenhouse, David. Observations on the growth and propagation of a proliferous onion. art. 21, p. 119–22.

Sect. 2

[Madison, James, Barton, B. S., and Galt, Dr.] Memorandums of the life and writings of Mr John Clayton, the celebrated botanist of Virginia. p. 139–45.

Sect. 3

Barton, B. S., and others. Miscellaneous facts and observations in natural history. p. 155–79.

Dunbar, William . . . 1) The leopard in New Mexico: 2) On a new species of Cabbage. . . . p. 160, 177. Written Mar. 1801.

Barton, Matthias. . . . The canvas-back at Columbia (on the Susquehannah). p. 161–62.

Brickell, John. . . . On two species of Crotalus. . . . p. 164, 176–77.

Robertson, Felix. . . . The flowering of cotton. . . . p. 172–73.

1806 Supplement no. 1. March 7. 3 + p 1–99.

Barton, B. S. Facts, observations, and conjectures, relative to the elephantine bones (of different species) that are found in various parts of North America, in a letter . . . to Cuvier. . . . art. 2, p. 22–35.

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See also note by *Reimarus, in v. 3, pt. 1, art. 16.

————. Account of the Cervus Wapiti, or southern elk of North America. art. 7, p. 36–55.

Extract from his "Fragments of the Natural history of Pennsylvania," pt. 2.

Peck, W. D. Tabula avium alibi hiemantium tempore vernali adventum commonstrans. . . . art. 8, p. 55–7.

Barton, B. S. Notice of the botany of the White Mountains in . . . New Hampshire. art. 9, p. 57–8.

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————. Miscellaneous facts and observations in natural history. p. 65–73.

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————. Prodromus of a flora of the states of New York, New Jersey, Pennsylvania, Delaware, Maryland, and Virginia. p. 77–92.

v. 2, pt. 2, September 26. 9 + 209 + 11 p. Sect. 1.

Gregg, Amos, Jr., and Barton, B. S. Memoranda of the natural history, diseases, and native remedies of some parts of the Island of Haiti. art. 2, p. 18–27.

Custis, Peter. Observations relative to the geography, natural history, etc. of the country along the Red River in Louisiana. . . . art. 7, p. 43–50.

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[Ellicott, Andrew]. Hints relative to swallows. art. 3, p. 116–18.

Walmsley, Thomas. Facts, experiments, and observations, relative to some American species of Lampyris, or fireflies. . . . art. 4, p. 118–23.

Davidge, J. B. Experiments and observations on the caterpillar which infests the Lombardy poplar. . . . art. 6, p. 139–57.

Barton, B. S. Additional facts and observations relative to the extinct species of American elephants. . . . art. 10, p. 166–73.

See previous pt. in Suppl. no. 1, art. 2 (above).

See also note by *Reimarus, in v. 3, pt. 1, art. 16 (below) .

1807 Jones, Calvin. Observations on American locusts. art. 11, p. 173–78.

Barton, B. S. Additional facts and observations, relative to the American locust. art. 13, p. 181–87.

Sect. 2

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Sect. 1

Shattuck, George. An essay on the influence of air upon animal bodies. art. 1, p. 3–17.

————. Some account of an excursion to the White Hills of New Hampshire. . . . art. 5, p. 26–35.

Silliman, Benjamin, and Kingsley, J. L. Account of a remarkable fall of meteoric stones in Connecticut; republished from a public paper entitled the "Connecticut Herald." art. 7, p. 39–57.

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*Reimarus, I. A. H. Questions relative to the American elephantine bones. . . . art. 16, p. 137–38.

See art. by Barton above in Suppl. no. 1, art. 2, and Suppl. no. 2, art. 10.

1809 Supplement no. 3, May. p. 203–312.

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Meade, William. Mineralogical and chemical account of the Yellow Springs, in the county of Chester, in Pa. . . . by a gentleman now on a mineralogical tour of the United States. art. 1, p. 207–16.

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SOCIETY FOR THE PROMOTION OF USEFUL ARTS, ALBANY, NEW YORK (1804)

History

THE SOCIETY FOR THE PROMOTION OF USEFUL ARTS, in the state of New York was incorporated in 1804, upon the expiration of the charter of the SOCIETY FOR THE PROMOTION OF AGRICULTURE, ARTS, AND MANUFACTURES, New York City and Albany (1791), q.v. It maintained a cabinet or museum of specimens from all parts of the state, which were cared for in a room in the then new Capitol of the State.

Its president was Robert R. Livingston, who served until 1813, when he was succeeded by Simeon De Witt. T. R. Beck was secretary.

It published three volumes of Transactions, which were numbered v. 2–4, in succession to v. 1, of the Society which preceded it.

In May, 1824, it was merged with the ALBANY LYCEUM OF NATURAL HISTORY (1823), q.v., to form the ALBANY INSTITUTE (1824), as its first department. Its most active naturalists during its existence were Jacob Green and T. R. Beck.

Bibliography

1807 SOCIETY FOR THE PROMOTION OF USEFUL ARTS, Albany, N. Y. . . . Transactions . . . Albany, N. Y., 1807–19. v. 2–4.

v. 1, was issued by the Society for the Promotion of Agriculture, Arts and Manufactures (1791), q.v.

See below for dates of publication of the other volumes.

1830 ALBANY INSTITUTE. History of the Institute, with an abstract of its proceedings. . . . (In its Trans. v. 1, appx. p. 1–74. 1830).

Contains the Charter of the Society for the Promotion of Useful Arts.

1871 MEADS, O[rlando]. Annual address . . . [On some of the leading facts in the history of the Institute] . . . (In Albany Inst. Trans. v. 7, p. 1–34. 1872).

The Presidential Address delivered before the Institute, May 25, 1871. See Albany Institute (1824).

Transactions (T)

Dates of Publication

v. 1, pt. 1, (See Soc. Prom. Agric. A. & Manuf. (1791)
v. 2, 1807
v. 3, 1814
v. 4, pt. 1, 1816
pt. 2, 1819

Papers on Natural History

1813 Beck, T. R. Annual address . . . On the mineralogical resources of the United States. T. v. 3, p. [5–43]. Rd Feb. 3.

1814 Green, Jacob. An address on the botany of the United States. T. v. 3, p. [63]–90. Rd Feb. 9.

Repr. Albany, Websters & Skinners, 1814. 30 p. Rev. in Med. Repos. v. 18 (n. s. v. 3), p. 62–3. Oct. 1815.

————. Catalogue of plants indigenous to the state of New York. T. v. 3, p. 91–136. Com. Feb. 23.

Assisted by John Le Conte, Frederick Pursh, Charles Whitlow, T. R. Beck, C. W. Eddy, & Edmonston.

1815 Beck, T. R., Green, Jacob, and Low, James. Report on the marble quarry in the town of Bennington, Vermont. T. v. 4, pt. 1, appx. p. 19–26. Rd Mar. 7 & April 4.

De Witt, Simeon. On a remarkable cold spring. T. v. 4, pt. 1, p. 68–9. Rd Mar. 21.

Tilton, James. Remarks on a species of Curculio, remarkably destructive to fruit. T. v. 4, pt. 1, p. 70–8. Rd Mar. 28.

Green, Jacob. Description of a cave and intermitting lake in Saratoga County, New York. T. v. 4, pt. 1, p. 79–82. Rd April 4.

————. Description of a cave near Bennington, Vermont. T. v. 4, pt. 1, p. 109–11. Rd April 4.

De Witt, Simeon. On the misnomer of some of the forest trees of the United States. T. v. 4, pt. 1, p. 112–18. Rd April 11.

1816 Van Schaick, G. W. Observations on the worm which of late has proved so destructive to bees. . . . T. v. 4, pt. 1, p. 145–50, 167–68. Rd Mar. 19.

1817 Tappen, Christopher, Jr. Sketches of the weather and progress of vegetation, at Kingston in Ulster County. T. v. 4, pt. 2, p. 7–9. Rd Jan. 28.

CAMBRIDGE BOTANIC GARDEN, CAMBRIDGE, MASS.

(1805)

History

"The Cambridge Botanic Garden occupies seven acres of land at the corner of Linnaean and Garden Streets, Cambridge. The fund for its establishment was raised by subscription in 1805, (coincident with the foundation of the Massachusetts Professorship of Natural History of Harvard College) and the grounds were laid out in 1807. The income available for its support was for many years very small, and sometimes precarious; in 1864, it was considerably augmented by subscriptions, and a movement to increase this somewhat further, so that the Garden may be placed upon a sufficient and independent basis, is now in progress (see also GRAY HERBARIUM, Harvard University: (1864).

William Dandridge Peck was in charge of the Garden from its establishment until his death in 1822. Thomas Nuttall was Curator from 1822 to 1834. It was left mainly in charge of the original gardener, William Carter until 1842, when Dr. Asa Gray became its director for the ensuing thirty years . . ." From An Account of the Garden in AMER. ASSOC. ADV. SC. Proc. 1880. Salem, Mass., 1881. v. 29, p. 779–81.

Thaddeus W. Harris was also in charge of the Garden for a short period. The Garden received strong financial support from both John Lowell, one of the earliest organizers and subscribers to the original garden fund, and his son John Amory Lowell.

Bibliography

1805 ANON. The foundation of the Massachusetts Professorship of Natural History at Harvard College . . . with documents relative to its establishment. Boston, Russell & Cutter, 1805. 21 p.
See also QUINCY, below.

1823 COGSWELL, J[oseph] G[reen]. . . . Donation of a valuable herbarium to the visitors of the Massachusetts Society for the Promotion of Agriculture, the presidents of the American Academy of Arts and Sciences, Harvard University and Massachusetts Medical Society; to the visitors of the Massachusetts Professorship of Natural History and the Botanic Garden. (In Mass. Agric. Repos. & Jour. v. 7, p. 371–73. 1823).

1840 QUINCY, Josiah. The Cambridge Botanic Garden. (In his History of Harvard College. 1840. v. 2, p. 328–30, 542–43).
Appx. no. 32 shows the donators and the respective amounts to the Mass. Professorship of Natural History and the Botanic Garden.

1886 INGERSOLL, Ernst. Harvard's Botanic Garden and its botanists. (In Century Mag. v. 32, p. 237–48, illus. pl. port. June, 1886)
Excellent descriptive and historical account.

1907 HARVARD MEMORIAL SOCIETY. Official guide to Harvard University; edited by the Harvard Memorial Society. Cambridge, Pub. by the University, 1907. 173 p. pl. map.
Botanic Garden, p. 122–24.

1911 ROBINSON, B. L. The removal of an old landmark. (In Harvard Graduates Mag. v. 19, p. 419–21, pl. 1911).

Papers on Natural History

1818 PECK, W[illiam] D[andridge]. A catalogue of American and foreign plants cultivated in the Botanic Garden, Cambridge, Massachusetts. Cambridge, Mass., 1818. 4 + 60 + 2 p. (In Mass. Hort. Soc. Trans.)

1824 NUTTALL, Thomas. List of rare or interesting plants which have flowered in the Botanical Garden, Cambridge, during the last three months. (In Bost. Jour. Phil. & Arts. v. 2, no. 3, p. 299–300. Nov. 1824).

Cont. in v. 2, no. 4–6, p. 395–96, 505–12, 611–14. Jan., Mar. & May, 1825; & cont. in v. 3, no. 1, p. 103–4. Oct. 1825. (See Bost. Jour. Phil. & Arts. (1823).

1846 GRAY, Asa. Chloris Boreali-Americana: Illustrations of new, rare, or otherwise interesting North American plants, selected chiefly from those recently brought into cultivation at the Botanic Garden, Harvard University: Decade I.

Com. to Amer. Acad. A. & Sc. (1780), Jan. 27, 1846. In its Mem. n. s. v. 3, p. 1–56, 10 col. pl. 69 fig. 1848.

CHARLESTON BOTANIC SOCIETY AND GARDEN, CHARLESTON, S. C. (1805)

History

“The Botanic Society was formed and incorporated in the year 1805. The Medical Society gave to it three hundred dollars, fifty dollars per annum and a large lot of land which had been generously given to them by Mrs. Savage, now Mrs. Turpin, to be used as a Botanic Garden. The inhabitants were invited to join the Association and on their annual payment of any sum between four and ten dollars, at their option, they were entitled to privileges, in proportion to their respective subscriptions and became members of the Botanic Society.

“An annual sum of one thousand one hundred and seventy-six dollars thus obtained from voluntary subscribers has given activity to the project. The garden was opened in the year 1805, and has been superintended ever since by a Committee, chosen partly by the Medical Society, and partly by other members of the Botanic Society. This committee keep in constant employ an experienced practical botanist, and a few laborers under him. The Institution has flourished beyond the most sanguine expectations of its friends. It is now enriched with a considerable number of plants, both indigenous and exotic, arranged according to the Linnaean system, and additions are constantly being made to it by the citizens and from foreign countries. From the proceeds of a lottery now pending hopes are entertained that the Society will be enabled to enlarge their plan so as to make their Garden the repository of everything useful, new and curious in the vegetable world. . . .'' (From RAMSAY, David. Hist. S. C. 1809. v. 2, p. 107–8) See Bibliography below.

''Our first concern will be the examination and arrangement of our indigenous plants, among which there are doubtless, many nondescripts. To extend the knowledge of our favorite pursuit, and to enlarge the field of botanic researches, we beg leave to propose . . . an exchange of our indigenous plants . . .'' (From Med. Repos. v. 9 (2d hexade, v. 3), no. 4, p. 434–36. April, 1806).

''Notwithstanding all the advantages and delights that this most pleasing and instructive science offered to the citizens in the adoption of the plan for its establishment; notwithstanding an annual sum of 1176 dollars thus obtained from voluntary subscribers added to what the Medical Society and Mrs. Turpin had done for it, and although the 'Garden' was opened the same year under the most favorable auspices and enriched with a considerable number of valuable indigenous and exotic plants, it flourished for a few years beyond the most sanguinary expectations of its friends; it has fallen!

''A second attempt was made by selling the original lot and improvements to effect a more extensive and at the same time more permanent establishment, the Medical Society renewed their former efforts towards its success, but it was in vain; the subscribers abandoned the valuable and interesting institution, and its site is now reduced to an equality with the surrounding farms.

''That this institution has not hitherto succeeded agreeable to the laudable wishes and designs of its founders, is much to be regretted; that it may yet at no distant period succeed beyond the most sanguine hope is most ardently wished; but whatever be the issue, theirs is the merit of having conceived its importance, and of having introduced it to the notice of their fellow-citizens who may yet appreciate the value, the extensive utility and absolute necessity of adopting and amply supporting such an institution in or near the city.

Such an establishment would become at once an invaluable seminary in which their sons might be instructed in the practical parts of that science which has ever been the delight of the learned among civilized nations. . . . And let us even yet cherish the hope that the legislators of the state convinced of the utility and national policy of patronizing the arts and sciences throughout the state, will shortly add to the list of their acts one for the appropriation of means adequate to the successful promotion of this laudable and essentially useful object." (From SHECUT, J. L. E. W. Medical and philosophical essays. 1819. p. 44–7) See Bibliography below.

The Garden was for a time in the care of M. Noisette, according to William Baldwin who visited the Garden on several occasions. (See Darlington's "Reliquianae Baldwinianeae).

Bibliography

1805 ANON. The Charleston Botanic Society and Garden. (In Phila. Med. & Phys. Jour. v. 2, pt. 1, p. 200. Nov. 1805).

Announcement made of the formation of the Society and the beginning of the Garden.

1806 ANON. The Charleston Botanic Society and Garden. (In Med. Repos. v. 9, (2d hexade, v. 3), no. 4, p. 434–36. April, 1806).

Request for the exchanging of specimens, with announcement of the organization of the Society and Garden.

1809 RAMSAY, David. The Botanic Society. (In his History of South Carolina. Charleston, 1809. v. 2, p. 107–8).

In 1858 ed. of Ramsay, pub. by W. E. Duffie complete in 1 v., the Botanic Society account appears on p. 60–1.

1819 SHECUT, J. L. E. W. The Botanic Society and Garden. (In his medical and philosophical essays. Charleston, 1819. p. 44–7).

Shecut was a member of both the Medical Society and the Botanic Society.

COLLEGE OF NEW JERSEY (PRINCETON) CABINET OF NATURAL HISTORY (1805)

History

"In 1805, a public cabinet of natural history (may have been De La Coste's, the purchase of which had been contemplated by David Hosack and some others), in New York City was placed on sale, and was purchased by the College of New Jersey at a cost of

$3,000. The college authorities were subsequently remunerated for this purchase by a gift from Elias Boudinot resulting from the sale of certain lands on the express condition that when the cabinet of natural history shall be paid for out of the avails of the lands aforesaid, said cabinet shall be open for the suitable inspection and for the benefit and improvement of the students of the insttiution, without subjecting them to any additional expense . . .'' MACLEAN, John. History of the College of New Jersey. 1877. p. 68–9.

The Cabinet was for a time in charge of Jacob Green, professor of natural history from 1818–1822. In 1832, Prof. John Maclean was authorized to employ (Sept. 25, 1832), Benedict Jaeger, then an instructor in languages at the college to put the cabinet into shape and take charge of it for the sum of $115. Little interest was taken in the Cabinet and it eventually went to pieces.

Bibliography

1822 GREEN, Jacob, and HOSACK, David. The donation of Dr Hosack's collection of minerals to the College of New Jersey. (In Amer. J. Sc. v. 4, p. 396–98. Feb. 1822)

1877 MACLEAN, John. The Cabinet of Natural History. (In his History of the College of New Jersey. Phila. 1877. p. 68–9, 286–87).

PIKE'S EXPEDITIONS (1805)

History

''Having completed your equipment, you are to proceed up the Mississippi with all possible diligence, taking the following instructions for your general government, which are to yield to your discretion in all cases of exigency. You will please to take the course of the river, and calculate distances by time, noting rivers, creeks, highlands, prairies, islands, rapids, shoals, mines, quarries, timber, water, soil, Indian villages, and settlements, in a diary to comprehend reflections on the winds and weather. You will please to proceed to ascend the main branch of the river until you reach the source of it. . . . You will not fail to procure specimens of whatever you may find curious, in the mineral, vegetable, or animal kingdoms, to be rendered at this place . . .'' Instructions from General Wilkinson to Z. M. Pike, of the 1st Regiment of Infantry, dated St. Louis, July 30th, 1805, ordering him to explore the Mississippi to its headwaters.

This journey occupied the period between August 9, 1805, and April 30, 1806. On June 24th, 1806, General Wilkinson issued orders from St. Louis for Pike to make a tour through the interior of Louisiana to the sources of the Arkansas. Extracts from the General's orders follow:

''You are to proceed without delay to the cantonment on the Missouri, where you are to embark the late Osage captives, and the deputation recently returned from Washington . . . and are to transport the whole up the Missouri and Osage Rviers to the town of the Grand Osage . . .

''In the course of your tour, you are to remark particularly upon the geographical structure, the natural history, and population . . . taking particular care to collect and preserve specimens of everything curious in the mineral and botanical worlds, which can be preserved and are portable . . .

''It is an object of much interest with executive to ascertain the direction, extent, and navigation of the Arkansaw and Red Rivers . . . and should circumstances conspire to favor the enterprise, you may detach a party with a few Osages to descend the Arkansaw, under the orders of Lt. Wilkinson or Sergeant Ballenger, properly instructed and equipped to take the courses and distances, to remark on the soil, timber . . . and you yourself may descend the Red River . . .'' Extracts both above and the present one taken from PIKE'S Account. . . . Phila. ed. appx. to pt. 3, p. 65–7 (no. 6), and London ed. pref. p. 12–15. (See editions below.)

Pike's diary of this expedition occupies the period from July 15, 1806, to Feb. 26, 1807. He was made prisoner by the Spanish, and his diary of the tour in what he calls New Spain, comprehends the interval between Feb. 27, and July 1st, 1807.

''In the execution of this expedition (to the headwaters of the Mississippi), I had no gentleman to aid me, and I literally performed the duties . . . of astronomer, surveyor, commanding officer, clerk, spy, guide, and hunter. . . On my return from the Mississippi voyage, preparations were making for a second, which was to be conducted by another gentleman of the Army; but General Wilkinson solicited as a favor that . . . I would agree to take charge of the expedition. . . . The great objects in view by this expedition . . . in addition to my instructions, were to attach the Indians to our government, and to acquire such geographical knowledge of the southwestern boundary of Louisiana as to enable the government to enter into a definitive arrangement, for a line of demarkation between that country and North Mexico.

"In this expedition I had the assistance of lieutenant James B. Wilkinson, and also of Doctor John H. Robinson, a young gentleman of science and enterprize who volunteered his services. . . .

"With respect to the great acquisitions which might have been made to the sciences of botany and zoology, I can only observe that neither my education nor taste led me to the pursuit; and if they had, my mind was too much engrossed in making arrangements for our subsistence and safety, to give time to scrutinize the productions of the countries over which we traversed, with the eye of a Linnaeus or Buffon; yet Dr Robinson did make some observations on those subjects, which he has not yet communicated . . . ." Extracts from the Preface by PIKE. Phila. ed. (1810), pref. p. 4–5; COUES ed. (1895), p. 2–3.

Pike on his second journey was accompanied by one sergeant, two corporals, and 17 privates. On his third trip, he had one lieutenant, a surgeon, one sergeant, two corporals, and sixteen privates and an interpreter.

Details of the route followed are outlined and reviewed in WARREN, (see Annot. Bibliog.), p. 19–21; and a copy of the itinerary followed on these journeys is given in the analysis below of COUES' edition of Pike's Travels.

A portion of the MS was presented to the American Philosophical Society, Philadelphia, at its meeting dated July 18, 1817, as indicated in its Proc. v. 22, appx. p. 472, 1884.

Bibliography

[1807] ANON. An account of a voyage up the Mississippi River, from St. Louis to its source; made under the orders of the War Departmen, by Lieut. Pike, of the United States Army, in the years, 1805 and 1806. Compiled from Mr Pike's Journal. n. p. [1807.] 68 p.

This entry is taken from COUES's "Bibliography of the editions of Pike's "Travels," in his edition, 1895 (see below), v. 1, pref. p. 33–5. "This pamphlet has no date, no author, no place of publication, title,—verso blank; pp. 1, 2; text pp. 3–67, with colophon ("Finis"); p. 68 being extract of a letter from N. Boilvin [Nicholas Boivin], Indian agent, to the Secretary of War, dated St. Louis, Oct. 6, 1806." Coues at the time, 1895, had a copy, and there were other copies in the Library of Congress, American Antiquarian Society, and the Ridgway Library of Philadelphia.

1895 COUES, Elliott. . . . Bibliography. . . . (In his Expeditions of Z. M. Pike. . . . N. Y. 1895. v. 1, pref. p. 33–50)

Thorough discussion of the various editions of Pike's "Expeditions." See analysis of the contents of his edition below.

Publications

(1) Philadelphia ed.

1810 PIKE, Z[ebulon] M[ontgomery]. An account of expeditions to the sources of the Mississippi, and through the western parts of Louisiana, to the sources of the Arkansaw, Kans, La Platte, and Pierre Jaun Rivers; performed by order of the government of the United States during the years 1805, 1806, and 1807. And a tour through the interior parts of New Spain, when conducted through these provinces by order of the Captain-General, in the year 1807 . . . illustrated by maps and charts. Philadelphia, C. & A. Conrad & co.; Petersburgh, Somervell & Conrad; Norfolk, Bonsal, Conrad & co.; Baltimore, Fielding Lucas, Jr.; John Binns, printer, 1810. 5 p. + 105 p. + 9 p. + [107]–277 p. + [2 p.] + 65 + (1) p. + 53 p. + 87 p. 2 charts, 4 maps, 1 port. 2 tab.

Consists primarily of three parts, and three appendices for these parts, all bearing separate pagination. The diaries are arranged chronologically day by day. The "Account" was rev. in the Med. Repos. v. 15, (3d hexade, v. 3), p. 256–64. Jan. 1812.

Contents:

Pt. 1 Journal of a voyage to the sources of the Mississippi in the years 1805 and 1806. p. 1–105.

From Aug. 9, 1805–April 30, 1806.

Meteorological observations — August, 1805–April, 1806. 9 p.

Pt. 2 Instructions to Lieutenant Pike, June 24, 1806 & July 12, 1806. p. 107–10.

Diary of an expedition made under the orders of the War Department . . . in the years 1806 and 1807, to explore the internal parts of Louisiana to the sources of the Arkansaw. p. [111]–204.

Pt. 3 Diary of a tour, made through the interior provinces of New Spain, in the year 1807, when under an escort of Spanish dragoons. . . . p. 205–77.

Written April 12, 1808.

Meteorological observations. . . . 2 p.

Appx. Pt. 1 Correspondence between Pike and General Wilkinson and miscellany. August 20, 1805–Oct. 1, 1805. p. 1–40. (no. 1–17).

no. 18 Observations on the soil, shores, quarries, timber, islands, rapids, confluent streams, highlands, prairies; the savages and settlements, which I met with on my voyage up the Mississippi, from St. Louis to its source. p. 41–65 + (1) p.

Appx. Pt. 2 no. 1. A dissertation on the soil, rivers, productions, animal and vegetable, with general notes on the internal parts of Louisiana, compiled from observations made by Capt. Z. M. Pike, in a late tour from the mouth of the Missouri, to the headwaters of the Arkansaw, and Rio del Norte, in the years 1806 and 1807; including observations on the aborigines of the country. p. [1]–18.

no. 2 Wilkinson, [James B]. . . . Report of his passage down the Arkansaw, &c. p. 20–32.

Written, New Orleans, April 6, 1807. Covers period June, 1806 to Jan. 9, 1807.

no. 3–15 Correspondence between Pike and General Wilkinson, and miscellany. p. 32–53.

Between July 17, 1806 & Oct. 24, 1806.

Appx. Pt. 3 no. 1 Geographical, statistical, and general observations made by Capt. Z. M. Pike on the interior provinces of New Spain, from Louisiana to the viceroyalty and between the Pacific Ocean, Gulph of California and the Atlantic Ocean or Gulph of Mexico. p. [1]–51.

Written, Wash. April 12, 1808 Timber & plains, mines, minerals, animals, etc. p. 5–7, 18–20, 25, 27, etc.

no. 2 Explanatory table of names of places, persons, and things made use of in this volume. p. [52]–3.

no. 3–12 Correspondence between Pike and General Wilkinson and miscellany, p. 53–72.

no. 13 Sketch of an expedition made from St. Louis to explore the internal parts of Louisiana, by order of his Excellency General James Wilkinson. p. 73–7.

no. 14 Miscellany. p. 78–87.

(2) London ed. (1811)

(A)

1811 PIKE, Zebulon Montgomery. Exploratory travels through the western territories of North America: comprising a voyage from St. Louis, on the Mississippi, to the source of that river, and a journey through the interior part of Louisiana, and the northeastern provinces of New Spain, performed in the years 1805, 1806, 1807 by order of the government of the United States. . . . London, Printed for Longman, Hurst, Rees, Orme, and Brown, 1811. 20 + 436 p. 2 maps. 4°.

Edited by Thomas Rees. See bibliographical note by Coues. v. 1, pref. p. 38 (see Bibliography above, or Coues ed., below).

The French, (Paris, 1812), the German, (Weimar, 1813), and the Dutch (Amsterdam, 1812–13) are translations based on the London ed.

(B)

This London ed. was repr. in 1889, under the editorship of Wm. M. Maguire, as follows:

PIKE, Z. M. Exploratory travels. . . . Denver, W. H. Lawrence & co., 1889. 24, 25–394 p.

Introd., by Maguire, pref. p. 5–13.

Contents: (of London ed. A)

(1)

Journal of the voyage from St. Louis to the source of the Mississippi, performed in the years 1805 and 1806. p. [1]–148.

Indian nations inhabiting the districts bordering on the Upper Mississippi. p. 122–38.

(2)

Journal of an expedition through the interior of Louisiana performed in the years 1806 and 1807. p. [149]–258.

(3)

Journal of a tour through the interior provinces of New Spain, in the year 1807, in continuation of the preceding narrative. p. [259]–390.

Appendix. p. 391–436.

Correspondence, etc. no. 1–20.

no. 10 WILKINSON, James B. Report . . . p. 407–16.

(3) COUES ed.

1895 COUES, Elliott, ed. The expeditions of Zebulon Montgomery Pike, to headwaters of the Mississippi River, through Louisiana territory, and in New Spain, during the years 1805–6–7; a new edition, now first reprinted in full from the original of 1810, with copious critical commentary, memoir of Pike, new map and other illustrations . . . New York, Francis P. Harper, 1895. 3 v. pl. port. 6 maps.

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LINNAEAN SOCIETY OF PHILADELPHIA (1806)

History

The Linnaean Society of Philadelphia was founded in 1806 as the Philadelphia Botanical Society. Its name for a time was also the American Botanic Society. In 1807 the name, Linnaean Society of Philadelphia was adopted. On June 10, 1807, the president of the Society, Benjamin Smith Barton, delivered a Discourse in which he said:

''The Philadelphia Linnaean Society was established for the promotion of natural history. Its original founders (the greater number of whom were young men), ardently attached to the study of nature, perceived the want of an institution which should be exclusively devoted to the cultivation of the different branches of natural history, an institution similar to those which have been founded, and have flourished in most of the countries of Europe, where the names, the nature and the properties of natural objects have been studied with any degree of attention of success . . . (p. 9).

''I do not despair of seeing the Society in possession of a room of its own. I hope to see its members in possession of a good and even extensive library. The latter may be formed without much difficulty, and at a very moderate expense, whenever the Society shall show, by its transactions or proceedings that it is all worthy of the name it bears. I think that some of your attention should be directed towards the formation of a museum or collection of natural objects, particularly such as belong to the American continent.

''I neither wish nor expect to see the Society engaged very extensively in this business, as there is already established among us, a Museum of great value (Peale's Philadelphia Museum (1784, q. v.), and which does honor to its founder and even to the United States; a Museum to which every American citizen should endeavor to contribute his mite of support. There are, however, two classes of objects which we ought to labor to collect; I mean, specimens of our indigenous plants and specimens of our minerals.'' BARTON, B. S. (see Bibliography, below: 1807).

In 1810 a notice of the Society appeared in the American Mineralogical Journal (1810), edited by Archibald Bruce, v. 1, p. 53–4, in which the officers of the Society at that date were as follows: president: B. S. Barton; vice-president, Samuel B. Smith; recording and corresponding secretaries, Joseph G. Shippen and Aaron Dickerson; curators, John H. Lambert and Samuel Hazard; committee on zoology, Benjamin Keighler, Samuel Stuart, George S. Schott, Archibald McKinney, Samuel Jackson, and Roberts Vaux; committee on botany, N. S. Allenson and Samuel Benezet; committee on mineralogy, Charles S. Wister, James Cutbush, and Walter Channing.

From a notice in the American Monthly Magazine & Critical Review; ed. by H. Biglow, v. 2, p. 82, Dec. 1817, we learn that the president at that date was W. P. C. Barton, and that the Society has not been very active and had been only recently revived after practically a virtual extinction.

With the founding of the more active Academy of Natural Sciences of Philadelphia (1812), q. v., the Society naturally became inactive and disappeared probably at the end of the decade.

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AMERICAN MINERALOGICAL JOURNAL (1810)

History

The "AMERICAN MINERALOGICAL JOURNAL" was founded by Archibald Bruce, a New York physician, in January, 1810, at New York City. It was the first strictly scientific journal to devote itself primarily to a special field of natural history. Unfortunately only one volume appeared, 1810–1814.

An announcement and prospectus of its formation was published in the "Medical REPOSITORY" (1797), v. 13 (3d hexade, v. 1), p. 202–3. Oct. 1809; & in v. 14 (3 hexade, v. 2), p. 99–100. July. 1810.

The first number was dated January, 1810; the others are difficult to determine, but they appear to have been published probably in January, 1811, January, 1812, and the whole four numbers in 1814.

"The object of this work is to collect and record such information as may serve to elucidate the mineralogy of the United States, than which there is no part of the habitable globe, which presents to the mineralogist a rich or more extensive field for investigation.'' —*Preface.*

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1810–14 (The) AMERICAN MINERALOGICAL JOURNAL: being a collection of facts and observations tending to elucidate the mineralogy and geology of the United States of America, together with other information relating to mineralogy, geology and chemistry, derived from scientific sources; conducted by Archibald Bruce. . . . New York. Printed and sold by Collins & co., 189 Pearl St., [1810]–1814. 1 v. 6 + 270 + 2 p.

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AMERICAN MEDICAL AND PHILOSOPHICAL REGISTER (1810)

History

The AMERICAN MEDICAL AND PHILOSOPHICAL REGISTER made its first appearance as a quarterly in New York City, July 1, 1810. Its editors were David Hosack and John Wakefield Francis, two prominent contemporary physicians and medical professors, who were very much interested in natural history. Hosack was professor of botany at the Medical College (College of Physicians & Surgeons), and at Columbia College.

In a prospectus issued June 1, 1810, it was indicated that the work would be divided into three parts:

1st Original communications, embracing the various subjects of medicine, chemistry, agriculture, natural history, botany, etc.

2d Review of new publications. . . .

3d Philosophical and literary intelligence. . . .

The periodical had a short-lived career, appearing in sixteen quarterly numbers or four volumes, from July, 1810 through April, 1814.

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ACADEMY OF NATURAL SCIENCES OF PHILADELPHIA (1812)

History

"The American Academy of Natural Sciences of Philadelphia originated on the 25th of January, 1812, at which time a few gentlemen resolved to meet once in every week, for the purpose of receiving and imparting information. The persons whose names appear on the minutes of this primary meeting are Dr Gerard Troost, John Shinn, Jacob Gilliams, Nicholas Parmentier, John Speakman, and Dr Camillus M. Mann, who state that they 'have conjointly proceeded to initiatory business, as well for themselves as for Mr Thomas Say, absent.' The second meeting was held on the 17th of March following, the minutes being signed by the above named gentlemen including Mr Say.

"The following declaration was at this time unanimously adopted: 'We will contribute to the formation of a museum of natural history, a library of works of science, a chemical experimental laboratory, an experimental philosophical apparatus, and every other desirable appendage or convenience for the illustration and advancement of natural knowledge, and for the common benefit of all the individuals who may be admitted members of our institution.' Such was the commencement of the Academy of Natural Sciences. But even at that late period, the study of natural history was confined, in this country, to a very few zealous individuals; and although several societies had been organized for concentrating the scientific talent and enterprise of Philadelphia, their duration was for the most part, ephemeral.

"About this period, however, natural history received a permanent impulse from the appearance of Wilson's 'American Ornithology,' and from the personal exertions and published tracts of Dr Benjamin Smith Barton. Botany, so ably illustrated by the ardor of Dr Muhlenberg, had several votaries at the time we allude to. Among the most zealous of these were Mr Nuttall, Mr Z Collins, Dr Waterhouse, and a few others. Mr Say was indefatigible in various branches; Mr Ord was devoted to geology; Mr Godon, Mr Conrad, and Dr Troost were active in exploring the mineral resources of our country; Mr Maclure was assiduously engaged in geology. . . .

"The Academy was for many years located in an inconvenient situation, and may even be said to have struggled for an existence. Books and collections of natural objects, these indispensable prerequisites for such an establishment, accumulated but slowly; and money, that 'primum mobile' of human achievements was sparingly at the disposal of the infant institution. At this juncture, the Academy found a truly munificent friend in William Maclure, Esq. This gentleman had amassed a truly handsome fortune in mechanical pursuits; and being possessed of an acute mind and extensive scientific acquirements, he attached himself to the Academy with a zeal and a liberality which have few examples on record. During a protracted visit to Europe, he collected a great number of books, which he presented to his adopted institution. He traversed the continent of Europe from Italy to Sweden and in every situation found something to feed the ardor of his mind and aid the cause of science. In these fruits of unwearied personal industry, the Academy shared largely, and its present valuable collections may be said to have mainly originated in the contributions of Mr Maclure. Among the co-adjutors of Mr. Maclure at that period of the Academy's history which most of all required the fostering care of its members, we have a melancholy pleasure in recording the names of Mr Z. Collins, the Abbe Correa de Serra (an eminent Portugese botanist who resided for several years in the U. S. until 1820. . . . The most complimentary resolutions were passed by the Academy on the occasion of his departure), Dr Barton, Dr. Waterhouse, and Mr Haines, all of whom are since deceased.

''As early as the year 1813, a subscription amounting to nearly $800 was entered into by a number of the members, for the purchase of Dr Seybert's collection of minerals, at that time one of the best in Philadelphia. This acquisition led, in 1814, to the delivery of a course of lectures on mineralogy and crystallography by Dr Troost, which was repeated in the subsequent year.

''The Academy was incorporated in the year 1817, from which its permanence and prosperity may be dated. . . . It was in a few years found necessary to provide more extensive accommodations, and on the third of January, 1826, the Society purchased the building and premises they now occupy. This great object was attained in the first place by a subscription of more than $2,000 on the part of the members; the remainder of the purchase money being loaned by a few members and others. The sum thus borrowed by the Society amounted to three thousand dollars, of which but three hundred had been paid off up to the month of August, 1837. At the period in question Mr Maclure came forward with his characteristic liberality to relieve the institution of the only remaining drawback to its prosperity. This he did, by presenting the Academy with the sum of $5,000 with which the debt was forthwith liquidated, and $2,300 was placed at interest for the use of the Society.

''The present building which was originally designed for a place of religious worship, is situated at the corner of Twelfth and George Streets; it is a quadrangular, stuccoed brick edifice, about forty-four feet by fifty, and surmounted by a dome. It presents a single dome, with a gallery eight feet broad projecting from the wall on all sides, midway between the floor and ceiling. The light is admitted from the dome, and from six side windows above the gallery.

''To make their collections extensively useful, and to diffuse the love of science in every class of the community, the Academy passed a law in the autumn of 1828, rendering its museum gratuitously accessible to the public; and it is accordingly open to the admission of citizens and strangers on the afternoons of Tuesday and Saturday throughout the year. The state legislature, duly appreciating the liberality and usefulness of the Academy, passed an act in 1831, exempting the institution from taxes for twenty years.

''The meetings of the Academy are held every Tuesday evening; they are open to visitors, excepting the last meeting in each month, which is reserved for the private business of the institution. The other, or ordinary meetings, are devoted to the reading of scientific papers, verbal communications, receiving the donations, etc., etc. The present number of resident members is upwards of 100. The list of correspondents is much more numerous, and embraces a large portion of the distinguished scientific men of all countries.

''The 'Journal' of the Academy was commenced in 1817—and it is an interesting fact, that nearly the whole of the 1st volume was printed in the house of Mr Maclure by Mr Nuttall, Mr Say and a few other members . . . (see below, for the Preface to JOURNAL, v. 1).

''LIBRARY. This library, which in natural history at least, is by far the richest in the United States, is indebted to Mr Maclure for seven-tenths of all the books contained in it. In the five years, from 1816 to 1820 inclusive, this munificent patron of science presented nearly 1500 volumes (including 146 folios and nearly 600 quartos) on natural history, the fine arts, antiquities, books of travels etc., embracing many of the most costly works on the subjects. . . . In 1834 the entire entomological library of Mr Thomas Say was presented by verbal bequest through his lady. The books and tracts in this collection are upwards of one hundred in number. . . .

''It is well known to Mr Maclure's friends, that in 1825, he projected a gigantic scheme of education, which was designed to embrace all that is valuable in literature, science, and art. The center of these operations was established at New Harmony, in Indiana, and thither, at a great expense, Mr Maclure concentrated his library, collections in natural history and whatever else could best promote his design, but his advanced years, and consequent infirmities, prevented his personal supervision of the plan, which during his long residence in the city of Mexico, became in a great measure, inoperative, and was finally suspended by the death of Mr Say. This event determined the proprietor of these treasures to make them useful through another channel, by transferring them to the Academy of Natural Sciences, which he accordingly did in the summer of 1835. This rare liberality at once doubled the library of our institution, and supplied it with a great number of valuable works, not only on natural history, but on all the subjects already enumerated. . . .

''ZOOLOGY. . . . The department of comparative anatomy embraces some highly interesting subjects, among which we may particularly mention the perfect skeleton of the Indian rhinoceros (R. indicus) brought home from the interior of Hindoostan by Dr Burrough, and presented to the Academy by subscriptions of the members.

''This department also embraces a series of the crania of all the classes of vertebrated animals, amounting to more than 500 specimens. The human skulls alone are nearly 200 in number, embracing numerous varieties of all the races of man.

''ORNITHOLOGY. Perhaps none of the natural sciences has been more assiduously cultivated by the members of the Academy than ornithology. This observation is established by reference to the splendid works which have successively appeared from Alexander Wilson, George Ord, Charles Lucien Bonaparte and J. J. Audubon. The collection of birds exceeds 1000 species, of which about 500 are displayed in cases. This series includes a collection of 250 species of the birds of Surinam presented by Dr Hering, late of that province and now of this city. From Dr Burrough, the Academy has received upwards of 250 species of birds from India, many of which are of extreme rarity.

ICHTHYOLOGY. The collection of fishes is as yet inconsiderable.

CONCHOLOGY. The cabinet of shells, which is ranged in horizontal cases, presents one of the most ornamental portions of the Academy's Museum. The number of species is upwards of 2,000. . . .

''HERPETOLOGY. The Reptiles are numerous, and include a large portion of the known American, and a great number of exotic species. This department is especially indebted to the exertions of Dr Harlan, Dr Burrough, Dr Blanding, and Dr Hering. During the year 1830 the latter gentleman presented upwards of 200 species of the serpents, lacerta, and other reptiles of the northeastern regions of South America. We have much pleasure in adding that the liberality of Dr Hering in this and other departments was suggested and directed by the late Rev. Lewis David de Schweinitz of Bethlehem, Pa. The collections were submitted to the discretional distribution of this gentleman, who transmitted them entire to the Academy of Natural Sciences.

"The Crustacea and Zoophytes embrace many American and some foreign species for which the Society is particularly indebted to the late Mr Say.

"ENTOMOLOGY. Of the many thousand species of Insects possessed by the Academy, a very large proportion is formed by the entire collection of the late Mr Thomas Say, who left it by verbal bequest through his lady, in 1834. It gives us much pleasure to add, that another collection of upwards of 4000 species chiefly collected by one of our members will be presented to the Society as soon as more effectual measures can be devised for their preservation. With the collections of Dr Hering already mentioned, were 400 species of insects, in fine order, from the province of Surinam. The collection of Lepidoptera has been chiefly derived from Mr T. R. Peale.

"BOTANY. The Herbarium embraces 33,000 species of plants, of which no less than 23,000 were bequeathed to the Academy by our late fellow-member, the Rev. L. D. de Schweinitz. These were the acquisitions of a single individual during a period of forty years devoted to a favorite science. Mr Schweinitz's American species were mainly collected by himself, though very many specimens were supplied by his correspondents. This great collection also embraces the entire herbarium of the late Dr Baldwin, which is particularly rich in plants of North and South America (especially from Florida and the vicinity of Buenos Ayres) and was, on inspection by Mr Schweinitz, found to contain upwards of 3,000 species not embraced in his previous collection.

"The Academy also possesses the valuable herbarium of Mr Thomas Nuttall. This gentleman is well known to have been for many years, ardently engaged in botanical researches, in the prosecution of which he has traversed the United States and territories, in almost every direction—the courses of the Missouri and Arkansas Rivers—the Great Lakes—Carolina, Georgia and Louisiana. Three thousand species of plants was the reward of these labors, and they are now incorporated in the Academy collection, while at a later period, Mr Nuttall presented his whole exotic herbarium, embracing among others 1,500 Cape plants, collected by Marson, a large number of New Holland plants, and many interesting new species from New Zealand and the South Sea Islands, collected by Forster, Labillardiere and others. . . . Still more recently, Mr Nuttall has enriched the collection by the donation of a complete suite of the specimens collected by him in his late arduous journey across the Rocky Mountains to the mouth of the Columbia River, the different parts of California and the Sandwich Islands. This list of donations embraces many hundreds of undescribed species.

"The whole, observes Mr Johnson, is now arranged after the neat and judicious manner of Mr De Schweinitz, into scientific order, on a plan to embrace the collections of the latter naturalist with the previous herbarium of the Academy, 'secured as far as possible from the depredations of insects, and easy of access for the purposes of research and comparison.' The merit of this beautiful and elaborate arrangement is almost exclusively due to Mr Pickering, who, in uniting the several collections has as far as practicable, brought together such plants as belong to the same natural families of Jussieu without disturbing the previous plan of Mr De Schweinitz who followed the artificial classification of Linnaeus . . . (Dr Menke, of Pyrmont, in Germany, has presented his entire herbarium through our fellow-member, Dr C. F. Rivinus, U. S. Consul at Dresden. This great collection, the fruit of many years ardent devotion to botanical science, embraces 20,000 species of plants).

"GEOLOGY AND MINERALOGY. Next to the botanical, the geological series is the most complete of the Academy's collections. It comprises about 5,000 species of which two-thirds are fossil organic remains of animals and plants. . . . The fossils are arranged according to the formations in which they occur and afford matter of great interest to the geologist.

"The mineralogical cabinet embraces about 3000 specimens which have been largely contributed to by Mr Maclure, especially in the European series. Incorporated with and forming a part of the above collection are several hundred valuable specimens deposited by Dr T. McEuen, T. Fisher, and Mr H. Seybert, Mr J. P. Smith and Mr C. U. Shephard. . . . In arranging the minerals, the system of Prof. Cleaveland has been adopted throughout.

"But perhaps the most valuable portion of the mineral collection is that which has been presented by Mr Maclure. The extent of this series is not known but there is reason to believe that it far exceeds both in the number and variety of the specimens, all the previous acquisitions of the Academy in this Department . . .'' Reprint of the HISTORY of the Academy of Natural Sciences of Philadelphia . . . by S. G. MORTON, Corres. Sec. of the Society. (In AMER. QUART. REGISTER. Bost. May, 1841. v. 13, no. 4, p. 433–38).

On March 3, 1858, the Biological section of the Academy was organized, and completed on April 5, 1858. The following officers were elected: Joseph Leidy, director; W. A. Hammond, vice-director; recorder, Henry Hartshorne; conservator, J. Cheston Morris.

The Report of the Committee of the Academy appointed to confer with a committee from the Biological Society on the proposed junction of the two sections met on Jan. 26, 1858, and its proceedings are reported in the Academy's Proc. v. 10, p. 2–5, 1858. Further proceedings of the newly formed section may be found in v. 10 & 11, 28 p. and 20 p. respectively in the appendices.

From 1840 to 1865 the collections of the Academy were constantly increased by donations from individuals, exploring parties and collectors, and the deposit of special collections. In 1846 T. B. Wilson purchased for the Academy the famous collection of birds belonging to the Duc de Rivoli aggregating more than 10,000 specimens. In 1860 he presented outright to the Academy the collection of birds belonging to him then on deposit in the Academy. In 1860, the heirs of A. E. Jessup started the Jessup fund for the assistance of younger naturalists. The building of the Academy was twice enlarged at the expense of T. B. Wilson.

See below under the BIBLIOGRAPHY for histories of the Academy during the period prior to 1865 and since.

The Proceedings of the Academy were begun in 1841; the Journal in 1817, and a new series (quarto), in 1847. Below are given the PAPERS ON NATURAL HISTORY to be found in these volumes arranged chronologically by date of reading, from 1817–1865.

Preface to the Journal, v. 1, May, 1817

''The members of the Academy of Natural Sciences of Philadelphia, desirous of acquiring knowledge themselves, and extending it among their fellow-citizens, have for some years been accustomed to meet at leisure hours for the purpose of communicating to each other such facts and observations as are calculated to promote the views of the society. By degrees, a collection of subjects in natural history was made, and has increased until a museum has been formed, which is already valuable, and which is daily increasing.

''In further pursuance of the objects of their institution, the Society have now determined to communicate to the public such facts and observations as having appeared interesting to them are likely to be interesting to other friends of natural science. They do not profess to make any periodical communication but well knowing how desirable it is, that persons engaged in similar pursuits, should be made acquainted as early as possible with what has been done by their fellow-laborers in the fields of science elsewhere, they mean to publish a few pages whenever it appears to them that materials worthy of publication have been put into their possession. In so doing, they propose to exclude entirely all papers of mere theory —to confine their communications as much as possible to facts—by abridging papers too long for publication in their original state, to present facts thus published clothed in as few words as are consistent with perspicuous description.

''Well aware that much leisure and superfluous wealth are not always found in company with an ardent love of science, they mean their proposed publication to be as cheap and as unostentatious as the nature of the subjects will admit, so that it need not encroach unnecessarily on the friends of the Society or of those who may wish to purchase it. In short, they are desirous of contributing their share to the mass of knowledge as early in all cases, and with as little show, and as small expense as possible. The present publication will be a specimen of what they propose in the future.

''They invite the lovers of science generally, and particularly all those who are anxious for its encouragement in the United States, to aid in promoting the objects of the institution, and to encourage the present publication, so long as the contents of it shall be deserving of public approbation.'' From its JOURNAL. v. 1, p. 1–2. May, 1817.

OFFICERS OF THE ACADEMY

President

Jan. 25, 1812–Dec. 1817	Gerard Troost
Dec. 31, 1817–Mar. 23, 1840	William Maclure
May 26, 1840–Dec. 1849	William Hembel
Dec. , 1849–May 15, 1851	Samuel G. Morton
Dec. , 1851–Dec. 1858	George Ord
Dec. , 1858–Dec. 1863	Isaac Lea
Dec. , 1863–June 28, 1864	Thomas B. Wilson
Dec. , 1864–Dec. 1865	Robert Bridges
Dec. , 1865–Dec. 1869	Isaac Hays

Vice-President: John Shinn, Jr., 1812–1816; N. S. Parmentier, 1812–1815; Zaccheus Collins, 1815–1831; George Ord, 1816–1834; William Hembel, 1831–1840; J. P. Wetherill, 1834–1853; S. G. Morton, 1840–1849; R. E. Griffith, 1849–1850; Robert Bridges, 1850–1864; Isaac Lea, 1853–1858; John Le Conte, 1858–1860; William S. Vaux, 1860–1874; John Cassin, 1864–1869.

Corresponding Secretary: Robert Hare, 1813–1814; Reuben Haines, 1814–1831; S. G. Morton, 1831–1840; Robert Bridges, 1840–1841; W. R. Johnson, 1841–1848; John Cassin, 1848–1852; John L. Le Conte, 1852–1859; Thomas Stewardson, 1859–1866.

Recording Secretary: C. M. Mann, 1812; John Barnes, 1812–1813, 1814–1817; Benjamin Say, 1813–1814; Edward Barton, 1817–1819; Franklin Bache, 1819–1821; W. H. Keating, 1821–1825; S. G. Morton, 1825–1829; Thomas McEuen, 1829–1835; Thomas D. Mutter, 1835–1836; Joseph Carson, 1836–1837; Thomas Stewardson, 1837–1840; A. D. Chaloner, 1840–1841; W. S. Zantzinger, 1841–1846; Theodore F. Moss, 1846–1847; John Lambert, 1847–1848; William Gambel, 1848–1849; Samuel Powel, 1849–1851; B. Howard Rand, 1851–1865; H. C. Wood, Jr., 1865–1867.

Treasurer: John Speakman, 1813–1814; William S. Warder, 1814–1815; Richard Randolph, 1815; Benjamin Say, 1815–1816; Jacob Gilliams, 1816–1826; George W. Carpenter, 1826–1860; William C. Henszey.

Librarians: John Speakman, 1814–1815; Caleb Richardson, 1815–1817; Jacob Pierce, 1817–1826; S. W. Conrad, 1826–1829; Charles Pickering, 1829–1833; P. B. Goddard, 1833–1834; A. L. Elwyn, 1839–1845; Joseph Leidy, 1845–1846; W. S. Zantzinger, 1846–1856; J. A. Meigs, 1856–1859; James C. Fisher, 1859–1861; R. E. Griffith, 1861–1862; J. D. Sergeant, 1862–1867.

Bibliography

1817 ACADEMY OF NATURAL SCIENCES OF PHILALELPHIA. Journal of the . . . (first series). Phila. May, 1817–42. 8 v.

New series, v. 1–date. Dec. 1847–date. 4°.

For dates of publication of the various parts of the Journal (J) through 1865, see below JOURNAL (J): Dates of Publication.

1818 ———. Act of incorporation and constitution of the . . . Phila. Printed by Dennis Heartt, 1818. 12 p.

1824 ———. Report of the transactions of the . . . during the year 1824, submitted by the recording secretary (W. H. Keating). Phila. 1824. 20 p.

1826 ———. List of officers and correspondents. Phila. 1826. 16 p.

1827 ———. Report of the transactions of the . . . during the years 1825 and 1826, submitted by . . . S. G. Morton. Phila. 1827. 15 p.

1829 ———. Report of the transactions of the . . . during the years 1827 and 1828, submitted by . . . S. G. Morton. Phila. 1829. 16 p.

1830 ANON. Notice of the Academy of Natural Sciences of Philadelphia, by a member. (In Amer. J. Sc. v. 19, p. 88–96. Oct. 1830)

Also pub. as a separate. Phila. 1830. 11 p.
2d ed. Phila. Mifflin & Parry, 1831. 16 p.
3d ed. Phila. 1836. 32 p.
4th ed. Phila. 1837. 24 p.

1836 GODDARD, Paul B[eck], and BRIDGES, Robert. Index to the herbarium of the Academy of Natural Sciences of Philadelphia. Phila. 1836.

In MS at the Library of the Academy.

ACADEMY OF NATURAL SCIENCES OF PHILADELPHIA. Act of incorporation, and by-laws of the . . . Phila. 1836. 8 p.

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1837 ———. Catalogue of the library of the . . . Phila. J. Dobson, 1837. 10 + 300 p.

———. List of members and correspondents from the origin of the Society on the 25th of January, 1812, to the first of November, 1837. Phila. Rackliff & King, 1837. 18 p.

Other ed., 1841. 19 p.; 1857, 38 p.; 1868, 27 p.

1839 JOHNSON, Walter R[ogers]. Address delivered on laying the cornerstone of the Academy of Natural Sciences of Philadelphia, May 25, 1839. . . . Phila. T. K. & P. G. Collins, 1839. 8 p.

1841 ACADEMY OF NATURAL SCIENCES OF PHILADELPHIA. Proceedings of the . . . v. 1–date. Phila. 1841–date.

See below PROCEEDINGS (P): Dates of Publication, through 1865.

MORTON, Samuel George. The Academy of Natural Sciences of Philadelphia. Boston, May, 1841. (In Amer. Quart. Register. v. 13, p. 433–38)

This is reprinted above under HISTORY, q.v.

PHILIPPS, John S. The date of publication of the Journal of the Academy. (In Acad. Nat. Sc. Phila. Proc. v. 1, p. 57–9. July, 1841)

1847 MORTON, Samuel George. . . . Brief history of the institution. . . . (In Acad. Nat. Sc. Phila. Proc. v. 3, p. 207–8. May 4, 1847)

ACADEMY OF NATURAL SCIENCES OF PHILADELPHIA. Journal of the . . . new series. . . . v. 1–date. Phila. 1847–date.

See above under 1817.

1852 RUSCHENBERGER, William Samuel Waithman. A notice of the origin, progress and present condition of the Academy of Natural Sciences of Philadelphia. . . . Phila. T. K. & P. G. Collins, 1852. 78 p.

Rd before the Academy, Feb. 10, 1852.
A 2d ed. Phila. 1860. 102 p.

1854 FOULKE, William Parker. Discourse in commemoration of the founding of the Academy of Natural Sciences of Philadelphia, delivered March 20, 1854 . . . in the Hall of the University of Pennsylvania. Phila. 1854. 58 p.

1857 ACADEMY OF NATURAL SCIENCES OF PHILADELPHIA. List of members and correspondents of the . . . from the origin of the Society in 1812 to March 1, 1857. Phila. 1857. 38 p.

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Another ed. Phila. 1877. 48 p.

———. Act of incorporation and by-laws of the . . . Phila. 1857 . 16 p.

See also above, 1st ed., 1818.

1862 SLACK, John Hamilton. Handbook to the Museum of the Academy of Natural Sciences of Philadelphia. Phila. 1862. 8 + 116 p.

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1871 RUSCHENBERGER, William Samuel Waithman. An address: the claims of the Academy of Natural Sciences of Philadelphia to the public favor. . . . Phila. 1871. 32 p. illus. pl.

1873 ———, and others. Address delivered on laying the corner-stone of an edifice for the Academy of Natural Sciences of Philadelphia, October 30, 1872. Phila. Collins, 1873. 29 p.

Addresses by Messrs. Ruschenberger, J. A. Meigs, E. R. Beadle and H. C. Wood, Jr.

1876 RUSCHENBERGER, William Samuel Waithman, and TRYON, George Washington, Jr. Guide to the Museum of the Academy of Natural Sciences of Philadelphia. . . . Phila. 1876. 128 p.

Pt. 2, p. 55– 98 History of the growth of the Museum.
Pt. 3, p. 99–119 Summary history of the Academy.
p. 121–28 Officers of the Academy.

1876 RUSCHENBERGER, William Samuel Waithman. Report of the condition of the Academy of Natural Sciences of Philadelphia on moving into its new edifice, S. W. corner of Race and Nineteenth Streets, made to the contributors to its building-fund, April 28, 1876. Phila. Collins, 1876. 56 p.

1882 KINGSLEY, J[ohn] S[terling]. The Philadelphia Academy. (In Pop. Sc. Mthly. v. 20, p. 531–38. Feb. 1882.)

1884 SCHARF, J[ohn] Thomas, and WESTCOTT, Thompson. The Philadelphia Academy. Phila. 1884. (In their History of Philadelphia. v. 2, p. 1199–1206.)

1892 PORTER, Edmund. A meeting of the Academy of Natural Sciences of Philadelphia, October 25, 1825. (In Penn. Mag. Hist. & Biog. v. 16, p. 249–50. 1892.)

1909 NOLAN, Edward [James]. A short history of the Academy of Natural Sciences of Philadelphia. Phila. 1909. 38 p. pl. port.

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Issued Nov. 22, 1912. The History and some of the proceedings at the celebration are repr. in Science. n. s. v. 35, p. 517–29. Apr. 5, 1912 (by Samuel G. Dixon and others).

1913 NOLAN, Edward J[ames], ed. An index to the scientific contents of the Journal and Proceedings of the Academy . . . 1817–1910; published in commemoration of the centenary of the Academy, March 21, 1912; ed. by E. J. Nolan. Phila. 1913. 1419 p.

Assisted by Wm. J. Fox. Contents as follows:

Introduction, pref. p. 5–6; Dates of publication, pref. p. 7–14; List of contributors to the Proceedings, 1841–1910, and to the Journal, 1st series, v. 1–8 and 2d series, v. 1–13, with references to the contributors, p. 1–187; Index to the genera and species described and referred to in the Proceedings and Journal, p. 189–1419.

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v. 2, pt. 1,		Jan. –Dec. 1821, 4 + 15 + 9 + p. [1–192], 14 pl.
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JOURNAL: SECOND SERIES (J: n. s.) 4°.

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ser. 2, v. 1, pt. 1–4,			1847–50,	356 p. 43 pl.
	pt. 1, p.	1– 94,	Dec. 1847	
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v. 2, pt. 1–4,			1850–54,	351 p. 34 pl.
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	pt. 1, p.	1– 95,	Dec. 1858	
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v. 5, pt. 1–4,			1862–63,	474 p. 52 pl.
	pt. 1, p.	1– 109,	Feb. 1862	
	2,	111– 216,	Oct. 1862	
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v. 1,	no. 1–33,	for	Mar. 1841–Dec. 1843,	pub.	1844, 10 + 341 p.
2,	1–12,	"	Jan. 1844–Dec. 1845,	"	1846, 325 p.
3,	1–12,	"	Jan. 1846–Dec. 1847,	"	1848, 11 + 349 p. 5 pl.
4,	1–12,	"	Jan. 1848–Dec. 1849,	"	1850, 10 + 270 + 26 p. 4 pl.
5,	1–12,	"	Jan. 1850–Dec. 1851,	"	1852, 10 + 362 + 16 p. 13 pl.
6,	1–12,	"	Jan. 1852–Dec. 1853,	"	1854, 15 + 458 + 78 + 19 + 36 + 16 p.
7,	1–12,	"	Jan. 1854–Dec. 1855,	"	1856, 14 + 454 + 41 p. 4 pl.
8,	1–12,	"	Jan.–Dec. 1856,	"	1857, 11 + 327 + 36 p. 3 pl.
9,	1–12,	"	Jan.–Dec. 1857,	"	1858, 8 + 228 + 14 p. map.
10,	1–12,	"	Jan.–Dec. 1858,	"	1859, 12 + 273 + 27 + 12 + 28 p.
11,	1–12,	"	Jan.–Dec. 1859,	"	1860, 11 + 355 + 20 + 11 + 24 + 20 p. 4 pl. map.
12,	1–12,	"	Jan.–Dec. 1860,	"	1861, 11 + 579 + 9 + 11 + 22 p. 8 pl.
13,	1–12,	"	Jan.–Dec. 1861,	"	1862, 7 + 556 p. 4 pl.
14,	1–12,	"	Jan.–Dec. 1862,	"	1863, 3 + 628 p. 1 pl.
15,	1–12,	"	Jan.–Dec. 1863,	"	1864, 3 + 391 p. 2 pl.
16,	1–12,	"	Jan.–Dec. 1864,	"	1865, 4 + 312 p. 9 pl.
17,	1–12,	"	Jan.–Dec. 1865,	"	1866, 4 + 310 p. 2 pl.

PAPERS ON NATURAL HISTORY READ BEFORE THE ACADEMY

1817 LE SUEUR, C. A. Characters of a new genus [Firoloida] and descriptions of three new species upon which it is formed discovered in the Atlantic Ocean . . . March and April, 1816, lat. 22°9′. J. v. 1, no. 3, p. 37–41, 2 pl. Rd April 15.

————. Description of six new species of the genus Firola, observed by Messrs LeSueur and Peron in the Mediterranean Sea . . . March and April 1809. J. v. 1, no. 1, p. 3–8, 1 pl. Pub. in May.

ORD, George. Account of a North American quadruped, supposed to belong to the genus Ovis. Rocky Mountain sheep. (Ovis Montana). J. v. 1, no. 1, p. 8–12, illus. Pub. in May.

See also Lewis & Clark Expedition (1804).

SAY, Thomas. Description of seven species of American fresh water and land shells, not noticed in the systems. J. v. 1, no. 1 & 2, p. 13–8. Pub. in May & June.

————. Descriptions of several new species of North American insects. J. v. 1, no. 2, p. 19–23. Pub. in June.

————. Some account of the insect known by the name of the Hessian fly, and of a parasitic insect that feeds on it. J. v. 1, no. 3, p. 45–8, 63–4, 1 pl. [11 fig.] June 24.

NUTTALL, Thomas. Observations on the genus Eriogonum, and the natural order Polygoneae of Jussieu. J. v. 1, no. 2 & 3, p. 24–31, 33–7. Pub. in June & July.

Le Sueur, C. A. Description of three new species of the genus Raja. J. v. 1, no. 3, p. 41–5, 2 pl. Rd July 1.

Say, Thomas. On a new genus of the Crustacea, and the species on which it is established. (Cerapus). J. v. 1, no. 4, p. 49–52. Rd July 8.

Ord, George. An account of an American species of the genus Tantalus or Ibis. J. v. 1, no. 4, p. 53–7. Rd July 8.

Say, Thomas. An account of the Crustacea of the United States. J. v. 1, no. 4–6, p. 57–63, 65–80, 97–101, 155–69, [235–53], 1 pl. Rd Aug. 5, Oct. 7, Nov. 4 & 11.

Continuation rd June 10, 1818 (q.v.) p. [235–53], are in pt. 2, no. 1, of v. 1.

Le Sueur, C. A. A short description of five (supposed) new species of the genus Muraena, discovered . . . in the year 1816. J. v. 1, no. 5, p. 81–3. Rd Aug. 19.

————. Description of a new species of the genus Cyprinus. J. v. 1, no. 5, p. 85–6. Rd Aug. 19.

————. Description of two new species of the genus Gadus. J. v. 1, no. 5, p. 83–5. Rd Aug. 26.

————. A new genus of fishes, of the order Abdominales proposed, under the name of Catostomus; and the characters of this genus, with those of its species, indicated. J. v. 1, no. 5 & 6, p. 88–96, 102–11, 134, 6 + 3 pl. Rd Sept. 16.

Nuttall, Thomas. An account of the two new genera of plants and of a species of Tillaea and Limosella, recently discovered on the banks of the Delaware, in the vicinity of Philadelphia. J. v. 1, no. 6, p. 111–23, 1 pl. Rd Sept. 16.

Le Sueur, C. A. An account of an American species of tortoise not noticed in the systems. J. v. 1, no. 5, p. 86–8, 1 pl. Rd Sept. 23.

Lake Erie tortoise (Testudo geographica).

————. Descriptions of four new species and two varieties of the genus Hydrargira. J. v. 1, no. 6, p. 126–34. Rd Oct. 21.

Say, Thomas. Descriptions of new species of land and fresh water shells of the United States. J. v. 1, no. 6, p. 123–26. Rd Oct. 28.

Maclure, William. Observations on the geology of the West India Islands, from Barbadoes to Santa Cruz, inclusive. J. v. 1, no. 6, p. 134–49. Rd Oct. 28.

See also Merrill (1), p. 306. (See Annot. Bib.)

Le Sueur, C. A. Observations on several species of the genus Actinia. J. v. 1, no. 6, p. 149–54, 169–89, 2 pl. [21 fig.]. Rd Nov. 18 & Dec. 9.

Nuttall, Thomas. Description of Collinsia, a new genus of plants. J. v. 1, no. 6, p. 189–92, 1 col. pl. Pub. in Dec.

1818 Le Sueur, C. A. Descriptions of several new species of North American fishes. J. v. 1, pt. 2, p. 222–35, 359–68, 4 + 1 pl. Rd Mar. 3.

————. Description of several new species of the genus Esox, of North America. J. v. 1, pt. 2, p. 413–17. Rd Mar. 3.

Green, Jacob. Descriptions of several species of North American Amphibia [genera Lacerta, Salamandra, Proteus], accompanied with observations. J. v. 1, pt. 2, p. 348–59. Rd May 12.

Note by Say, p. 405–7. Rd Oct. 6.

Ord, George. Observations on two species of the genus Gracula of Latham. J. v. 1, pt. 2, p. 253–60. Rd May 19.

Say, Thomas. Account of two new genera, and several new species, of fresh water and land shells. J. v. 1, pt. 2, p. 276–84. Rd May 26.

Ord, George. An account of the Florida jay, of Bartram. J. v. 1, pt. 2, p. 345–47. Rd May 26.

Maclure, William. Essay on the formation of rocks, or an inquiry into the probable origin of their present form and structure. J. v. 1, pt. 2, p. 261–76, 285–310, 327–45. Pub. in June, July & Aug.

See also Merrill (1), p. 306. (See Annot. Bib.)

Say, Thomas. An account of the Crustacea of the United States (cont.). J. v. 1, pt. 2, p. 313–19, 374–401, 423–58, 482–85. Rd June 10, July 7, Sept. 22 & Dec. 1.

Appendix to this ''Account,'' p. 445–58.

Previous pts. rd Aug. 5, 1817 (above, q.v.).

Elliott, Stephen. Observations on the genus Glycine, and some of its kindred genera. J. v. 1, pt. 2, p. 320–26, 371–73. Rd June 23.

Le Sueur, C. A. Observations on a new genus [Maclurite] of fossil shells. J. v. 1, pt. 2, p. 310–13, 1 pl. Rd June 30.

Say, Thomas. Note on Professor Green's paper on the Amphibia. . . . J. v. 1, pt. 2, p. 405–7. Rd Oct. 6.

Green's paper is on p. 348–59. Rd May 12.

Mitchill, S. L. Description of three species of fish. J. v. 1, pt. 2, p. 407–12. Pub. in Oct.

Anguilla oceanica; Gadus albidus; Salmo amethystus.

Rafinesque, C. S. Description of three new genera of fluviatile fish, Pomoxis, Sarchirus and Exoglossum. J. v. 1, pt. 2, p. 417–22, 485–86, 1 pl. Rd Dec. 1 and 8.

Say, Thomas. Description of a new genus [Alasmidonta] of fresh water bivalve shells. J. v. 1, pt. 2, p. 459–60. Pub. in Dec.

Gilliams, Jacob. Description of two new species of Linnaean Lacerta. J. v. 1, pt. 2, p. 460–62, 1 pl. Pub. in Dec.

Salamandra variolata & Scincus erythrocephalus.

Lea, Isaac. An account of the minerals at present known to exist in the vicinity of Philadelphia. J. v. 1, pt. 2, p. 462–82. Pub. in Dec.

Say, Thomas. Description of three new species of the genus Naesa. J. v. 1, pt. 2, p. 482–85. Pub. in Dec.

Should have been included in his ''Account of the Crustacea of the U. S.'' See his Paper rd June 10 (above, q.v.).

1820 ————. Descriptions of the Thysanourae of the United States. J. v. 2, pt. 1, p. 11–4. Rd Nov. 21.

————. Descriptions of the Myriapodae of the United States. J. v. 2, pt. 1, p. 102–14. Rd Nov. 21.

Le Sueur, C. A. Description of a new genus [Mollinesia] and of several new species of fresh water fish indigenous to the United States. J. v. 2, pt. 1, p. 2–8, 3 pl. Rd Dec. 19.

————. Description of two new species of Exocetus. J. v. 2, pt. 1, p. 8–11, 1 pl. Rd Dec. 19.
E. fasciatus & E. Nuttallii.

Nuttall, Thomas. Observations on the geological structure of the valley of the Mississippi. J. v. 2, pt. 1, p. 14–52. Rd in Dec.
See also Merrill (1), p. 255–56. (See Annot. Bib.)

1821 Hentz, N. M. A notice concerning the spider, whose webb is used in medicine. J. v. 2, pt. 1, p. 53–5, illus. Pub. in Feb.
Repr. Bost. Soc. Nat. Hist. Occas. Papers. v. 2, p. 162–64. 1875.

Say, Thomas. An account of the Arachnides of the United States. J. v. 2, pt. 1, p. 59–82, illus. Pub. in Feb. & Mar.
Also in Repr. of Say's Entomological Writings. Phila. 1859 & 1891. v. 2, p. 9–23.

Troost, Gerard. Description of some new crystalline forms of the minerals of the United States [Zircon & Phosphate of lime]. J. v. 2, pt. 1, p. 55–8, illus. Rd Mar. 6.

Le Sueur, C. A. Descriptions of several new species of cuttle-fish. J. v. 2, pt. 1, p. 86–101, pl. Rd Mar. 20.

Nuttall, Thomas. Observations on the serpentine rocks of Hoboken, in New Jersey, and on the minerals which they contain. (In Amer. J. Sc. (1818), v. 4, p. 16–23, May 1821). Rd May 8.

Say, Thomas. An account of some of the marine shells of the United States. J. v. 2, pt. 2, p. 221–48, 257–76, 302–25. Rd July 24.

Nuttall, Thomas. A description of some new species of plants, recently introduced into the gardens of Philadelphia, from the Arkansas territory. J. v. 2, pt. 1, p. 114–23. Rd Aug. 7.

Le Sueur, C. A. Observations on several genera and species of fish, belonging to the natural family of the Esoces. J. v. 2, pt. 1, p. 124–38, 2 pl. Pub. in Nov.

Seybert, Henry. Analyses of American minerals. J. v. 2, pt. 1, p. 139–46. Pub. in Nov.

Vanuxem, Lardner. On two veins of Pyroxene or Augite in granite. J. v. 2, pt. 1, p. 146–49. Pub. in Nov.

Say, Thomas. Descriptions of univalve shells of the United States. J. v. 2, pt. 1, p. 149–79. Pub. in Nov. & Dec.
See also Long Expedition to the Rockies (1819).

1822 Nuttall, Thomas. Descriptions of rare plants recently introduced into the gardens of Philadelphia. J. v. 2, pt. 1, p. 179–82. Rd Mar. 5.

Vanuxem, Lardner. Description and analysis of the table spar, from the vicinity of Willsborough, Lake Champlain. J. v. 2, pt. 1, p. 182–85. Rd Mar. 5.

Jessup, A. E. Geological and mineralogical notice of a portion of the northeastern part of the state of New York. J. v. 2, pt. 1, p. 185–91. Rd Mar. 19.

KEATING, W. H. Account of the Jeffersonite, a new mineral discovered at the Franklin iron works, near Sparta in New Jersey by Lardner Vanuxem & W. H. Keating. . . . J. v. 2, pt. 2, p. 194–204. Rd June 4.

TROOST, Gerard. Description of a new crystalline form of quartz. J. v. 2, pt. 2, p. 212–14, illus. Rd June 4.

LE SUEUR, C. A. Descriptions of the five new species of the genus Cichla of Cuvier. J. v. 2, pt. 2, p. 214–21, 1 pl. Rd June 11.

VANUXEM, Lardner. On a new locality of the Automalite. J. v. 2, pt. 2, p. 249–51. Rd July 16.

LE SUEUR, C. A. Description of three new species of the genus Sciaena. J. v. 2, pt. 2, p. 251–56, 1 pl. Rd July 26.

VANUXEM, Lardner, and Keating, W. H. On the geology and mineralogy of Franklin, in Sussex Co., New Jersey. J. v. 2, pt. 2, p. 277–88, col. sect. Rd Aug. 6.

TROOST, Gerard. Description of some crystals of sulphate of strontian, from Lake Erie. J. v. 2, pt. 2, p. 300–02, illus. Rd Aug. 6.

KEATING, W. H. Observations upon the Cadmia found at the Ancram iron works in Columbia Co., New York, erroneously supposed to be a new mineral. J. v. 2, pt. 2, p. 289–96. Rd Sept. 10.

LE SUEUR, C. A. On the Onykia angulata. J. v. 2, pt. 2, p. 296–99, 1 pl. Rd Sept. 10.

JAMES, Edwin. Geological sketches of the Mississippi valley. J. v. 2, pt. 2, p. 326–29, map. Rd Oct. 8.

See also Long Expedition to the Rockies (1819).

SAY, Thomas. On a quadruped belonging to the order Rodentia. J. v. 2, pt. 2, p. 330–43, 1 pl. Rd Nov. 5.

Isodon pilorides.

LE SUEUR, C. A. Description of a Squalus, of a very large size, which was taken on the coast of New Jersey. J. v. 2, pt. 2, p. 343–52, 1 pl. Rd Nov. 5.

SAY, Thomas. On a South American species of Oestrus which inhabits the human body. J. v. 2, pt. 2, p. 353–60. Rd Nov. 26.

SCHWEINITZ, L. D. de. On two remarkable hepatic mosses found in North Carolina. J. v. 2, pt. 2, p. 361–70, 1 pl. Rd Nov. 26.

SAY, Thomas. Description of univalve terrestrial and fluviatile shells of the United States. J. v. 2, pt. 2, p. 370–81. Rd Dec. 24.

———. Descriptions of Dipterous insects of the United States. J. v. 3, pt. 1, p. 9–54, 73–104. Rd Dec. 24.

Collected on the Long Expedition to the Rockies (1819). Also in Repr. Say's Ent. Writings. 1859 & 1891. v. 2, p. 38–66; 67–88.

1823 WORTH, James. An account of the insect [Aegeria, Fabricius] so destructive to the peach tree. J. v. 3, pt. 1, p. 216–21. Rd Jan. 7.

HARLAN, Richard. Dissection of a Batrachian animal in a living state. J. v. 3, pt. 1, p. 54–9, 1 pl. Rd Feb. 5.

See also note in v. 6, 1829, p. 147–48.

Le Sueur, C. A. Descriptions of several new species of Ascidia. J. v. 3, pt. 1, p. 2–8, 3 pl. Rd Mar. 25.

Vanuxem, Lardner. Description and analysis of the Zirconite of Buncombe Co., North Carolina. J. v. 3, pt. 1, p. 59–64. Rd Apr. 8.

Harlan, Richard. Observations on fossil elephant teeth, of North America. J. v. 3, pt. 1, p. 65–7, 1 pl. Rd May 6.

Vanuxem, Lardner. Description, analysis etc. of lamellar Pyroxene. J. v. 3, pt. 1, p. 68–73. Rd May 20.

Troost, Gerard. Account of the Pyroxene of the United States, and descriptions of some new varieties of its crystalline forms. J. v. 3, pt. 1, p. 105–24, 1 pl. Rd June 10.

Nuttall, Thomas. Observations on the genus Oryzopsis. J. v. 3, pt. 1, p. 125–28. Rd July 1.

Vanuxem, Lardner. On the Marmolite of Mr Nuttall. J. v. 3, pt. 1, p. 129–35. Rd July 1.

See also Amer. J. Sc. (1818), v. 4, p. 16–23, Nov. 1821. Art. by Nuttall.

*Finch, John. Geological essay on the Tertiary formations in America. Rd July 15. (In Amer. J. Sc. (1818), v. 7, p. 31–43. Nov. 1823).

See also Merrill (1), p. 266. (See Annot. Bib.)

Nuttall, Thomas. Remarks on the species of Corallorhiza, indigenous to the United States. J. v. 3, pt. 1, p. 135–39, 1 pl. Rd Aug. 5.

Say, Thomas. Descriptions of Coleopterous insects collected in the late expedition to the Rocky Mountains . . . under the command of Major Long. . . . J. v. 3, p. 139–216, 238–82, 298–331, 403–62. Rd Oct. 22.

Cont. in, v. 4, p. 83–99. 1824.

See also Long Expedition (1819). Also in Repr. of Say's Ent. Writings. 1859 & 1891. v. 2, p. 89–138, 139–66, 167–86, 187–224, 225–36.

Nuttall, Thomas. Notices of American Spodumen. J. v. 3, pt. 2, p. 284–86. Written Nov. 22.

Troost, Gerard. Notice of the Yenite of Rhode Island and several other American minerals. J. v. 3, pt. 1, p. 222–24. Rd Nov. 25.

1824 Bonaparte, Charles. An account of four species of stormy Petrels. J. v. 3, pt. 2, p. 227–33, 2 pl. Rd Jan. 13.

Troost, Gerard. Description of the American Petalite from Lake Ontario. J. v. 3, pt. 2, p. 234–37. Rd Jan. 13.

Le Sueur, C. A. Description of a new species of Cephalopode of the genus Loligo. J. v. 3, pt. 2, p. 282–84, 1 pl. Rd Feb. 3.

————. On three new species of parasitic Vermes, belonging to the Linnaean genus Lernaea. J. v. 3, pt. 2, p. 286–93, 1 pl. Rd Feb. 17.

Troost, Gerard. Description of a new crystalline form of the Chrysoberyl. J. v. 3, pt. 2, p. 293–95, illus. Rd Mar. 2.

Harlan, Richard. On a new fossil genus, of the order Enalio Sauri, Conybeare. J. v. 3, pt. 2, p. 331–37, 1 pl. Rd Mar. 9.

BONAPARTE, Charles. Observations on the nomenclature of Wilson's "Ornithology." J. v. 3, pt. 2, p. 340–71. Rd Mar. 9.

Continuation read on Mar. 23 (below).

HARLAN, Richard. On a new extinct fossil species of the genus Ichthyosaurus. J. v. 3, pt. 2, p. 338–40. Rd Mar. 16.

LE SUEUR, C. A. Description of two new species of the genus Batrachoid of Lacepede. J. v. 3, pt. 2, p. 395–403. Rd Mar. 16.

BONAPARTE, Charles. Observations on the nomenclature of Wilson's "Ornithology." J. v. 4, p. 25–66, 163–200, 251–77. Rd Mar. 23 & Nov. 9 & 23.

Previous pt. rd Mar. 9 (above); Cont. rd May 31, 1825 (below).

HARLAN, Richard. On a species of Lamantin resembling the Manatus Senegalensis (Cuvier) inhabiting the coast of East Florida. J. v. 3, pt. 2, p. 390–94, 1 pl. Rd Mar. 30.

LE SUEUR, C. A. Description of several new species of Holothuria. J. v. 4, pt. 1, p. 155–63. Rd Apr. 6.

BOWEN, G. T. Description and analysis of the Sillimanite, a new mineral. J. v. 3, pt. 2, p. 375–81. Rd Apr. 6.

Also in Amer. J. Sc. (1818), v. 8, p. 113–18 (art. 8), May, 1824.

BONAPARTE, Charles. On a new species of duck, described by Wilson as the same with the Anas fuligula of Europe. J. v. 3, pt. 2, p. 381–89. Rd Apr. 6.

HARLAN, Richard. On an extinct species of Crocodile not before described, and some observations on the geology of West Jersey. J. v. 4, pt. 1, p. 15–24, 1 pl. Rd May 4.

VANUXEM, Lardner, and Keating, W. H. Observations upon some of the minerals discovered at Franklin, Sussex Co., New Jersey. J. v. 4, pt. 1, p. 3–11. Rd June 1.

Also in Bost. J. Phil. & Arts (1823), v. 2, no. 2, p. 133–38. Sept. 1824.

SAY, Thomas. Descriptions of new Hemipterous insects collected in the expedition to the Rocky Mountains. . . . J. v. 4, pt. 2, p. 307–45. Rd June 1.

See Long Expedition (1819). Also in Repr. of Say's Ent. Writings. Phila. 1859 & 1891. v. 2, p. 237–60.

GODMAN, J. D. Description of the Oshyoides of the Mastodon. J. v. 4, pt. 1, p. 67–72, 1 pl. Rd June 8.

DIETZ, R. Description of a testaceous formation at Anastasia Island, extracted from notes made on a journey to the Southern part of the United States, during the winter of 1822 and 1823. J. v. 4, pt. 1, p. 73–80. Rd June 8.

Notes by SAY, p. 78–80. Say's notes repr. Bull. Amer. Palaeont. v. 1, no. 5, p. 295–98. 1896.

*POEPPIG, Edward. Nova generis Capromys, Desm. species. J. v. 4, pt. 1, p. 11–5. Rd June 15.

TROOST, Gerard. Description of a new crystalline form of the Andalusite. J. v. 4, pt. 1, p. 122–23, illus. Rd June 29.

Say, Thomas. An account of some of the fossil shells of Maryland. J. v. 4, pt. 1, p. 124–55, 7 pl. Rd July 20.

Repr. Bull. Amer. Palaeont. v. 1, no. 5, p. 300–31. 1896.

Gilliams, Jacob. Description of a new species of fish of the Linnaean genus Perca. J. v. 4, pt. 1, p. 80–2, 1 pl. Rd Aug. 3.

P. scolopsis, Cuvier.

Le Sueur, C. A. Description of several species of the Linnaean genus Raia, of North America. J. v. 4, pt. 1, p. 100–21, 3 pl. Rd Aug. 17.

Troost, Gerard. Observations on the zinc ores of Franklin and Sterling, Sussex Co., New Jersey. J. v. 4, pt. 2, p. 220–31. Rd Sept. 7.

Harlan, Richard. Notice of the Plesiosaurus and other fossil reliquiae, from the state of New Jersey. J. v. 4, pt. 2, p. 232–36, 1 pl. Rd Sept. 7.

Say, Thomas. On the fresh water and land tortoises of the United States. J. v. 4, pt. 2, p. 203–19. Rd Oct. 12.

Harlan, Richard. Description of two species of Linnaean Lacerta, not before described, and construction of the new genus Cyclura. J. v. 4, pt. 2, p. 242–51, 2 pl. Rd Nov. 30.

————. Description of a new species of Biped Seps. J. v. 4, pt. 2, p. 284–86. Rd Dec. 7.

Wood, W. W. Description of four new species of the Linnaean genus Blennius and a new Exocetus. J. v. 4, pt. 2, p. 278–84, 1 pl. Rd Dec. 14.

Harlan, Richard. Description of a new species of Scincus. J. v. 4, pt. 2, p. 286–88, 1 pl. Rd Dec. 21.

————. Description of two new species of Agama vultuosa and cornuta. J. v. 4, pt. 2, p. 296–304, 1 pl. Rd Dec. 21.

Le Sueur, C. A. Description of two new species of the Linnaean genus Blennius [herminier and hentz]. J. v. 4, pt. 2, p. 361–64. Rd Dec. 21.

1825 ————. Description of a new fish of the genus Salmo [microps]. J. v. 5, pt. 1, p. 48–51, 1 pl. Rd Jan. 11.

Say, Thomas. Descriptions of new species of Coleopterous insects inhabiting the United States. J. v. 5, p. 160–204, 237–84, 293–304. Rd Jan. 18.

————. Descriptions of three new species of Coluber, inhabiting the United States. J. v. 4, pt. 2, p. 237–41. Rd Jan. 25.

Wood, W. W. Description of a new species of Salamander, [punctatissima]. J. v. 4, pt. 2, p. 306–7. Rd Feb. 8.

Schweinitz, L. D. de. Description of a number of new American species of Sphaeriae. J. v. 5, pt. 1, p. 3–16, 2 pl. Rd Feb. 15.

Say, Thomas. On two genera and several species of Crinoidea. J. v. 4, pt. 2, p. 289–96. Rd Mar. 1.

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Bonaparte, Charles. Description of a new species of South American Fringilla. J. v. 4, pt. 2, p. 350–51. Rd Mar. 1.

Coates, Reynell. Remarks on the floating apparatus, and other peculiarities, of the genus Janthina. J. v. 4, pt. 2, p. 356–60. Rd Mar. 1.

Ord, George. An account of a new species of the genus Arvicola [riparius]. J. v. 4, pt. 2, p. 305–6. Rd Mar. 8.

Say, T[homas], and Ord, G[eorge]. A new genus of Mammalia proposed and description of the species upon which it is founded. J. v. 4, pt. 2, p. 345–49, 352–55, illus. 2 pl. Rd Mar. 8 & 22.

Genera Neotoma and Sigmodon.

*Bigsby, J. J. Description of a new species of Trilobite [Paradoxus boltoni]. J. v. 4, pt. 2, p. 365–68, 1 pl. Rd Mar. 15.

Say, Thomas. On a new species of Modiola [opifex]. J. v. 4, pt. 2, p. 368–70, illus. Rd Apr. 19.

Bonaparte, Charles. Descriptions of ten South American birds. J. v. 4, pt. 2, p. 370–87. Rd Apr. 19.

Notes to this paper in v. 5, p. 137–40.
Rd July 12 (below).

————. Descriptions of two new species of Mexican birds. J. v. 4, pt. 2, p. 387–90. Rd Apr. 26.

Say, Thomas. Descriptions of some new species of fresh water and land shells of the United States. J. v. 5, pt. 1, p. 119–31. Rd May 3.

Bonaparte, Charles. Additions to the Ornithology of the United States. J. v. 5, pt. 1, p. 28–31. Rd May 10.

Say, Thomas. Descriptions of new species of Hister and Hololepta, inhabiting the United States. J. v. 5, pt. 1, p. 32–47. Rd May 10.

Troost, Gerard. Description of a new crystalline form of Apophyllite, Laumonite, and Amphibole, and of a variety of Pearlstone. J. v. 5, pt. 1, p. 51–6, illus. Rd May 17.

Bonaparte, Charles. Observations on the nomenclature of Wilson's "Ornithology." J. v. 5, pt. 1, p. 57–106. Rd May 31.

Previous pts. rd Mar. 23, 1824 (q.v.)

Harlan, Richard. Description of a new species of Salamandra [picta]. J. v. 5, pt. 1, p. 136. Rd June 21.

Bonaparte, Charles. Notes to the paper entitled "Descriptions of ten species of South American birds." J. v. 5, pt. 1, p. 137–40. Rd July 12.

See other paper rd April 19 (above).

Le Sueur, C. A. Descriptions of four new speceis of Muraenophis. J. v. 5, pt. 1, p. 107–9, 1 pl. Rd July 19.

M. macularia, zebra, ocellata and bengalensis.

Green, Jacob. Description of a new species of Salamander [tigrina]. J. v. 5, pt. 1, p. 116–18. Rd July 19.

Godman, J. D. Note on the genus Condylura of Illiger. J. v. 5, pt. 1, p. 109–16, 135. Rd July 19 and Aug. 9.

Le Sueur, C. A. Description of a new species of the genus Saurus (Cuv.) [minutus]. J. v. 5, pt. 1, p. 118–19, 1 pl. Rd July 26.

Harlan, Richard. Description of a variety of the Coluber [fulvius, Linn.], a new species of Scincus, and two new species of Salamandra. J. v. 5, pt. 1, p. 154–58, 221. Rd Sept. 6, 1825 and Jan. 3, 1826.

Nuttall, Thomas. Description of two new genera of the natural order Cruciferae [Selenia and Streptanthus]. J. v. 5, pt. 1, p. 132–35, 2 pl. Rd Oct. 4.

——————. Observations on a species of Anemone, of the section Pulsatilla, indigenous to the United States. J. v. 5, pt. 1, p. 158–59, 1 pl. Rd Oct. 11.

Say, Thomas. Descriptions of marine shells recently discovered on the coast of the United States. J. v. 5, pt. 2, p. 207–21. Rd Oct. 18.

——————. On the species of the Linnaean genus Asterias, inhabiting the coast of the United States. J. v. 5, pt. 1, p. 141–54. Rd Nov. 1.

——————. On the species of the Linnaean genus Echinus, inhabiting the coast of the United States. J. v. 5, pt. 2, p. 225–29. Rd Nov. 8.

1826 Bonaparte, Charles. On the distinction of two species of Icterus, hitherto confounded under the specific name of Icterocephalus. J. v. 5, pt. 2, p. 222–25. Rd Feb. 28.

Harlan, Richard. Description of a land tortoise, from the Gallapagos Islands, commonly known as the "Elephant tortoise," testudo elephantophus, (nobis). J. v. 5, pt. 2, p. 284–92, 1 pl. Rd Sept. 5.

——————. Description of an hermaphrodite Orang Outang, lately living in Philadelphia. J. v. 5, pt. 2, p. 229–36, 2 pl. Rd Oct. 17.

Hentz, N. M. Descriptions of some new species of North American insects. J. v. 5, pt. 2, p. 373–75, 1 pl. Rd Oct. 24.

Harlan, Richard. Genera of North American Reptilia, and a synopsis of the species. J. v. 5, pt. 2, p. 317–72. Rd Dec. 12.

> Cont. in J. v. 6, p. [7–38], 53–5. Latter rd May 1, 1827. See also note by Say rd before Maclurian Lyc. Phila. (1826), Apr. 23, 1827. In its Contr. v. 1, p. 37–8. July, 1827.

Wetherill, J. P. Observations on the geology, mineralogy, etc., of the Perkiomen lead mine, in Pennsylvania. J. v. 5, pt. 2, p. 305–16, 1 pl. Rd Dec. 19.

1827 James, Edwin. Remarks on the lime stones of the Mississippi lead mines. J. v. 5, pt. 2, p. 376–80. Rd Jan. 23.

Harris, T. W. Description of three species of the genus Cremastocheilus. J. v. 5, pt. 2, p. 381–89. Rd Feb. 6.

Harlan, Richard. Description of a new species of Grampus, (Delphinus, Cuv.) inhabiting the coast of New England. J. v. 6, pt. 1, p. 51–3, illus. Rd Mar. 6.

Conrad, S. W. Remarks on the Osmunda claytoniana of Linnaeus . . . J. v. 6, pt. 1, p. 39–40, 1 pl. Rd Mar. 13.

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————. . . . Facts in ornithology . . . P. v. 1, p. 54. Rd July 13.

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————. Descriptions of nineteen species of Tertiary fossils of Virginia and North Carolina. P. v. 1, p. 323–29. Rd Nov. 21 & Dec. 19.

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An appendix on the Red pumice of Missouri; by a committee, p. 239–40.

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*Owen, Richard. Observations on certain fossils from the collection of the Academy . . . P. v. 3, p. 93–6. Rd Aug. 11.
Also in J. n. s. v. 1, pt. 1, art. 3, p. 18–20, 1 pl. Dec. 1847.

Morton, S. G. Description of two living hybrid fowls, bet. Gallus and Numida. P. v. 3, p. 101–3. Rd Sept. 1.

Leidy, Joseph. On the mechanism which closes the membranous wings of the genus Locusta. J. n. s. v. 1, pt. 1, art. 6, p. 68–9, illus. Rd Sept. 15.
Also in P. v. 3, p. 104.

Dickeson, M. W. . . . Fossil bones . . . from Natchez, Miss. P. v. 3, p. 106–7. Rd Oct. 6.

Haldeman, S. S. On several new genera and species of insect. P. v. 3, p. 124–28. Rd Oct. 27.

Morton, S. G. Hybridity in animals considered in reference to the question of the unity of the human species. P. v. 3, p. 121. Rd Nov. 3 & 10.
In Amer. J. Sc. (1818), ser. 2, v. 3, p. 39–50, 203–12. Jan. & Mar. 1847.

Wickersham, C. P. . . . Fossil tracks in the red sandstone of the Connecticut Valley. P. v. 3, p. 119–21. Rd Nov. 10.

Cassin, John. Note on an instinct probably possessed by the herons, (Ardea, Linn.). P. v. 3, p. 137. Rd Nov. 17.

Hallowell, Edward. Description of a locality . . . near Plattsburgh, N. J., whence fossil bones of a young Mastodon had been obtained. P. v. 3, p. 130–31. Rd Dec. 8.

Morris, Miss M. A. . . . On the discovery of the larvae of the Cicada septendecim . . . P. v. 3, p. 132–34, 190, 238. Rd Dec. 15, 1846 & Mar. 16 & Aug. 3, 1847.

Leidy, Joseph. On the situation of the olfactory sense in the terrestrial tribe of the gasteropodous Mollusca. P. v. 3, p. 136–37. Rd Dec. 15.
Also in J. n. s. v. 1, pt. 1, art. 6, p. 69–70. Dec. 1847.

1847 Haldeman, S. S. Descriptions of several new species and one new genus of insects. P. v. 3, p. 149–51. Rd Feb. 2.

Tuomey, M[ichael]. Notice of a discovery of a cranium of the Zeuglodon (Basilosaurus). P. v. 3, p. 151–53, illus. Rd Feb. 16.
Also in J. n. s. v. 1, pt. 1, art. 2, p. 16–7. Dec. 1847.

Sharpless, Aaron, and Kite, William. On living hybrids between the guinea fowl and the turkey. P. v. 3, p. 185–86. Rd Mar. 2.

Gibbes, R. W. New species of Myliobates from the Eocene of South Carolina, with other genera not heretofore observed in the United States. J. n. s. v. 1, pt. 4, art. 25, p. 299–300, 1 pl. [13 fig.]. Rd Apr. 20.

————. On the fossil genus Basilosaurus, Harlan, (Zeuglodon, Owen), with a notice of specimens from the Eocene green sand of South Carolina. J. n. s. v. 1, pt. 1, art. 1, p. [5]–15, 5 pl. [27 fig.]. Rd Apr. 20, May 4, July 27.

CASSIN, John. Description of a new rapacious bird in the Museum of the Academy . . . P. v. 3, p. 199–200. Rd Apr. 20.

LE CONTE, J. L. Fragmenta entomologica. J. n. s. v. 1, pt. 1, art. 7, p. 71–93. Rd May 18.

Abstract in P. v. 3, p. 212.
1) Triplacidum Boreali-Americanarum synopsis; p. 71–3.
2) De Lycis Boreali-Amercanus; p. 73–83.
3) Pedilus, Fisch. p. 83–4.
4) Varia; p. 84–93.

LEIDY, Joseph. . . . On Distoma helicis . . . P. v. 3, p. 220–21. Rd June 22.

ABERT, J. W. A supposed new species of quail inhabiting New Mexico. P. v. 3, p. 221–22. Rd June 29.

Ortyx squamata, Vigors. See also Abert's Examination of New Mexico (1846).

McCALL, G. A. Description of a supposed new species of Columba, inhabiting Mexico, with some account of the habits of the Geococcyx viaticus, Wagler. P. v. 3, p. 233–35. Rd July 13.

LEIDY, Joseph. History and anatomy of the hemipterous genus Belostoma. J. n. s. v. 1, pt. 1, art. 6, p. 57–67, 1 pl. [15 fig.] Rd July 13.

HALDEMAN, S. S. Descriptions of North American Coleoptera, chiefly in the cabinet of J. L. LE CONTE, with reference to described species. J. n. s. v. 1, pt. 2, art. 8, p. 95–110. Rd Aug. 3.

PEASE, W. S. On fossils from Maryland. P. v. 3, p. 242–43. Rd Aug. 10.

LEIDY, Joseph. Description and anatomy of a new and curious subgenus of Planaria; and descriptions of two new species. P. v. 3, p. 248–52. Rd Aug. 17 & 24.

————. On the fossil horse of America. P. v. 3, p. 262–66, 328, illus. Rd Sept. 7.

GIBBES, R. W. Description of a new species of Squalides from the Tertiary beds of South Carolina. P. v. 3, p. 266–68. Rd Sept. 7.

HALLOWELL, Edward. Description of a new species of Coluber inhabiting the United States. P. v. 3, p. 278–80. Rd Sept. 7.

*DAWSON, J. W. On the gypsum of Nova Scotia. P. v. 3, p. 271–74. Rd Oct. 5.

CONRAD, T. A. Observations on the Eocene formation, and descriptions of 105 new fossils of that period, from the vicinity of Vicksburg, Miss., with an appendix. P. v. 3, p. 280–99, 1 pl. Rd Oct. 12.

Also in J. n. s. v. 1, pt. 2, p. 111–34, 4 pl. [151 fig.] Aug. 1848.

Leidy, Joseph. . . . Remarks upon the very slow destructibility of animal tissues in certain states. P. v. 3, p. 313–14. Rd Nov. 9.

Hallowell, Edward. On the horned viper of western Africa. P. v. 3, p. 319–21. Rd Nov. 23.

Leidy, Joseph. On a new genus and species of a fossil Ruminantia, Poebrotherium Wilsoni. P. v. 3, p. 322–26. Rd Nov. 23.

Also in Amer. J. Sc. (1818), ser. 2, v. 5, p. 276–79. Mar. 1848.

Cassin, John. Description of a new Buceros, and a notice of the Buceros elatus (Temm.). P. v. 3, p. 330–31. Rd Dec. 21.

Also in J. n. s. v. 1, pt. 2, art. 10, p. 135–36, 1 col. pl. Aug. 1848.

————. Description of three new species of the genus Icterus (Briss.) . . . P. v. 3, p. 332–34. Rd Dec. 21.

Also in J. n. s. v. 1, pt. 2, art. 11, p. 137–38, 2 col. pl. Aug. 1848.

1848 Leidy, Joseph. On some bodies in the Boa constrictor resembling the Pacinian corpuscles. P. v. 4, p. 27–8, 1 pl. Rd Feb. 1.

Nuttall, Thomas. Descriptions of plants collected by William Gambel in the Rocky Mountains and Upper California. P. v. 4, p. 7–26. Rd Feb. 1 & 8.

Also in J. n. s. v. 1, pt. 2, art. 13, p. 148–89, 3 pl. Aug. 1848.

Agassiz, Louis. On the relationships of the Dorudon . . . P. v. 4, p. 4–5. Rd Feb. 8.

Cassin, John. Descriptions of new species of the genus Cyanocorax, Boie . . . in the collection of the Academy . . . P. v. 4, p. 26–7. Rd Feb. 8.

Hallowell, Edward. Description of two new species of Onychocephalus, from the western coast of Africa. P. v. 4, p. 59–61. Rd Mar. 21.

————. Notes of the post-mortem appearances of a Cynocephalus papion, which died at the menagerie in Philadelphia. P. v. 4, p. 62–3. Rd Mar. 21.

Leidy, Joseph. On a fossil genus and species of Ruminantoid Pachydermata: Merycoidodon Culbertsonii. P. v. 4, p. 47–50, 1 pl. Rd Apr. 4.

Bachman, John. Notes on the generation of the Virginian opossum (Didelphis Virginiana). P. v. 4, p. 40–8. Rd Apr. 4.

Includes a letter from Myddleton Michel on the "Generation of the opossum." p. 47–8.

Lea, H. C. Catalogue of the Tertiary Testacea of the United States. P. v. 4, p. 95–107. Rd Apr. 4.

Savage, T. S. On the habits of some African animals, one Saurian and two Ophidians. P. v. 4, p. 36–9. Rd Apr. 11.

McCall, G. A. Some notes on Mexican birds, heretofore not fully described. P. v. 4, p. 63–4. Rd May 16.

Gibbes, R. W. Monograph of the fossil Squalidae of the United States. J. n. s. v. 1, art. 12 & 14. p. 139–47, 191–206, 4+3 pl. [53+[12 fig.] Rd June 6.

Cassin, John. Descriptions of new species of birds of the genera Vidua, Briss, Euplectus, Sw., Pyrenestes, Sw., and Pitylus, Cuv., specimens of which are in the Academy . . . P. v. 4, p. 65–8. Rd June 20.

Also in J. n. s. v. 1, pt. 3, art. 19, p. 241–43, 2 col. pl. Aug. 1849.

Gambel, William. Description of a new Mexican quail. P. v. 4, p. 77. Rd Aug. 1.

Ortyx thoracicus.

———. Descriptions of two new Californian quadrupeds. P. v. 4, p. 77–8. Rd Aug. 1.

Dipodomys agilis & Mus Californicus.

Morton, S. G. On four skulls of Shoshonee Indians. P. v. 4, p. 75–6. Rd Aug. 8.

Cassin, John. Description of a new Tanagra, in the Academy . . . collection. P. v. 4, p. 85–6. Rd in Aug.

T. nigro-aurita.

Hallowell, Edward. Notes on the post-mortem appearances observed in a Cynocephalus porcarius, which died in the Philadelphia menagerie . . . P. v. 4, p. 86–7. Rd Oct. 3.

Cassin, John. Catalogue of Birds collected by W. H. Pease, during the march of the U. S. Army from Vera Cruz to the city of Mexico. P. v. 4, p. 87–91. Rd Oct. 24.

Pease, W. H. Observations on the geology and natural history of Mexico. P. v. 4, p. 91–4. Rd Oct. 24.

Leidy, Joseph. Observations on the development of bone in the structure of the articular cartilage, and on the relation of the areolar tissue, with muscle and tendon. P. v. 4, p. 116–20. Rd Dec. 5.

Conrad, T. A. Description of two new genera and new species of recent shells, etc. P. v. 4, p. 121. Rd Dec. 12.

Also in J. n. s. v. 1, pt. 3, art. 15, p. 207–9. Aug. 1849.

Cassin, John. Descriptions of owls, presumed to be undescribed . . . in the Academy collection . . . P. v. 4, p. 121–25. Rd Dec. 19.

Also in J. n. s. v. 2, pt. 1 & 2, art. 4 & 12, p. 51–4, 95–7, 3 col. pl. Nov. 1850 & Jan. 1852.

Hallowell, Edward. Description of a new species of Salamander from upper California. P. v. 4, p. 126. Rd Dec. 19.

S. lugubris.

Gambel, William. Contributions to American ornithology. P. v. 4, p. 126–29. Rd Dec. 19.

1849 Morton, S. G. Additional observations on a new living species of Hippopotamus. J. n. s. v. 1, pt. 3, art. 18, p. 231–39, 3 pl. [15 fig.] Rd Feb. 6.

Cassin, John. Catalogue of the Vulturidae in the collection of the Academy . . . P. v. 4, appx. 7 p. Rd Feb. 13.

————. Catalogue of the Strigidae in the collection of the Academy . . . P. v. 4, appx. 19 p. Rd Feb. 13.

Hallowell, Edward. Notes of the post-mortem appearances of a Cynocephalus (?) which died in the menagerie at Philadelphia. P. v. 4, p. 151–52. Rd Feb. 20.

Conrad, T. A. Descriptions of new fresh water and marine shells. P. v. 4, p. 152–56. Rd Feb. 20.

Also in J. n. s. v. 1, p. 275–80, 3 col. pl. [31 fig.]

Cassin, John. Descriptions of new species of the genera Nyctale, Brehm; and Sycobius, Vieill; in the Academy collection . . . P. v. 4, p. 157–58. Rd Feb. 20.

Also in J. n. s. v. 1, p. 295–97, 2 col. pl. Includes species Micrastur, G. R. Gray.

————. Notes of an examination of the family Vulturidae, in the Academy collection . . . P. v. 4, p. 158–62. Rd Feb. 20.

Haldeman, S. S. Cryptocephalinarum Boreali-Americae diagnoses, cum speciebus novis Musei Lecontiani. J. n. s. v. 1, pt. 3, art. 20, p. 245–65. Rd Mar. 13.

Abstract in P. v. 4, p. 170–72.

Keller, Wilhelm. On ciliary cells in some marine naked Hollusea, in embryo. P. v. 4, p. 173–74. Rd Mar. 13.

Meigs, C. D. Observations on the reproductive organs, and on the foetus of Delphinus Nesarnak. J. n. s. v. 1, pt. 3, art. 21, p. 267–73, 2 pl. Rd Apr. 10.

Leidy, Joseph. Tapirus Americanus fossilis. P. v. 4, p. 180–82. Rd May 15.

Hallowell, Edward. Description of a species of Eryx, from Madras. P. v. 4, p. 184, 1 pl. Rd July 3.

Savage, T. S. The driver ants of western Africa. P. v. 4, p. 195–202, illus. Rd July 10.

Haldeman, S. S. On several new Hymenoptera of the genera Ampulex, Sigalphus, Chelonus and Dorylus. P. v. 4, p. 203–4. Rd Aug. 14.

Morris, Miss M. H. On Cecidomyia culmicola. P. v. 4, p. 194. Rd Aug. 21.

Baird, S. F. Revision of the North American tailed Batrachia, with descriptions of new genera and species. J. n. s. v. 1, pt. 4, art. 23, p. 281–94. Rd Aug. 28.

*Dawson, J. W. Notice of specimens of wheat midge from Nova Scotia. P. v. 4, p. 210–11. Rd Sept. 4.

Savage, T. S. Observations on the species of Termitidae of West Africa, described by Smeathman as Termes bellicosus, by Linnaeus as T. fatalis. P. v. 4, p. 211–21. Rd Sept. 4.

Morton, S. G. Observations on the size of the brain in various races and families of man. P. v. 4, p. 221–24, tab. Rd Sept. 25.

Also in Amer. J. Sc. (1818), v. 59, p. 246–49, tab. Mar. 1850.

Leidy, Joseph. On the existence of Entophyta in healthy animals as a neutral condition. P. v. 4, p. 225–33. Rd Oct. 9.

Cassin, John. Descriptions of new species of birds of the family Caprimulgidae, specimens of which are in the Academy collection . . . P. v. 4, p. 236–39. Rd Oct. 16.

Leidy, Joseph. Observations on the characters and intimate structure of the odoriferous glands of the Invertebra. P. v. 4, p. 234–36, 1 pl. Rd Oct. 23.

Cassin, John. Monograph of the birds composing the genera Hydropsalis, Wagler, and Antrostomus, Nuttall. J. n. s. v. 2, pt. 2, art. 14, p. 113–24, 2 col. pl. Rd Oct. 30.

McMinn, J. M. On the snow bug . . . P. v. 4, p. 246. Rd Nov. 20.

Leidy, Joseph. Descriptions of two species of Distoma with the partial history of one of them. J. n. s. v. 1, pt. 4, art. 26, p. 301–10, 1 pl. [16 fig.] Rd Dec. 4.

Leidy, Joseph. Descriptions of new genera and species of Entophyta. P. v. 4, p. 249–50. Rd Dec. 11.

Le Conte, J. L. An attempt to classify the longicorn Coleoptera of the part of America north of Mexico. J. n. s. v. 1, pt. 4, art. 27, p. 311–40. Rd Dec. 11.

Cont. rd Sept. 16, 1851 (below, q.v.).

Conrad, T. A. Descriptions of one new Cretaceous, and seven new Eocene fossils. J. n. s. v. 2, pt. 1, art. 2, p. 39–41, 1 pl. [15 fig.] Rd Jan. 22.

Haldeman, S. S. Report on the progress of entomology in the United States during the year 1849. P. v. 5, p. 5–7. Rd Feb. 12.

Conrad, T. A. Descriptions of new species of fresh water shells. P. v. 5, p. 10–1. Rd Feb. 12.

Benson, S. A. On the Hippopotamus Liberiensis . . . P. v. 5, p. 21. Rd Mar. 5.

Gibbes, L. R. Catalogue of the Crustacea in the Academy collection . . . Aug. 20, 1847, with notes on the most remarkable. P. v. 5, p. 22–30. Rd Mar. 12.

Leidy, Joseph. Descriptions of new Entophyta growing within animals. P. v. 5, 7–9, 35–6. Rd Apr. 16.

————. Descriptions of some American Annelida abranchia. J. n. s. v. 2, pt. 1, art. 3, p. 43–50, 1 pl. 19 fig. Rd Apr. 23.

*MacLeay, J. S. On a fossil fish from New Holland . . . P. v. 5, p. 53. Rd May 7.

Cassin, John. Descriptions of new species of birds of the genera . . . in the Academy collection . . . Vidua, Hyphantornis, Hirundo, Atticora, Acanthylis, and Cypselus. P. v. 5, p. 56–9, 2 pl. Rd June 18.

Moss, T. F. Description of a new Carpolite from Arkansas. P. v. 5, p. 59, illus. Rd June 18.

Trigonocarpum Woofruffii.

1850 Cassin, John. Descriptions of the new species of birds of the genera, Paradisea, Pastor, Buceros, and a proposition to re- name others of the genera Alcyone and Hirundo. P. v. 5, p. 67–8. Rd Aug. 20.

————. Description of a new species of the genus Paradisea, Linn. in the Academy collection . . . J. n. s. v. 2, pt. 2, art. 16, p. 133–34, 1 col. pl. Rd Aug. 20.

Also in P. v. 5, p. 88.

Owen, D. D., and Shumard, B. F. Descriptions of fifteen new species of Crinoidea from the sub-carboniferous limestone of Iowa, collected during the U. S. Geological Survey of Iowa, Wisconsin and Minnesota in 1848–49. J. n. s. v. 2, pt. 1, art. 6, p. 57–70, 1 pl. [16 fig.] Rd Aug. 20.

See also Owen's Iowa, Wisconsin & Minnesota Survey (1848).

Owen, D. D., Norwood, J. G., and Evans, John. Notice of fossil remains brought by Mr J. Evans from the ''Mauvaises Terres'' or Bad lands of White River, 150 miles west of the Missouri. P. v. 5, p. 66–7. Rd Aug. 20.

Kilvington, Robert. A collection of Australian plants. P. v. 5, p. 81. Rd Sept. 3.

Morton, S. G. . . . Some remarks on the value of the word species in zoology . . . P. v. 5, p. 81–2. Rd Sept. 10.

Leidy, Joseph. Contributions to Helminthology. P. v. 5, p. 96–8, 205–9, 224–27, 239–44, 284–90, 349–51. Rd Oct. 1, 1850 & May 6, Aug. 12, 1851.

Morton, S. G. ''Observations on the antiquity of some races of dogs.'' P. v. 5, p. 85–9. Rd Oct. 8.

Leidy, Joseph. Notes on the development of the Gordius aquaticus. P. v. 5, p. 98–100. Rd Oct. 8.

————. Observations on two new genera of Mammalian fossils, Eucrotaphus Jacksonii, and Archaeotherium Mortoni. P. v. 5, p. 90–3. Rd Oct. 15.

————. Description of some Nematoid Entozoa infesting insects. P. v. 5, p. 100–2. Rd Oct. 15.

Cassin, John. Descriptions of new species of Birds of the genera Parus, Linn., Emberiza, Linn., Carduelis, Briss., Myiothera, Ill., and Leuconerpes, Sw. . . . P. v. 5, p. 103–6, 6 pl. Rd Oct. 22.

Deane, James. Fossil footprints of the Connecticut River. J. n. s. v. 2, pt. 1, art. 7, p. 71–4, 2 pl. Rd Oct. 22.

Townsend, J. K. On the giant wolf of North America, Lupus gigas. J. n. s. v. 2, pt. 1, art. 8, p. 75–9. Rd Oct. 22.

Leidy, Joseph. Description of three Filariae. P. v. 5, p. 117–18. Rd Nov. 5.

————. Description of new genera of Vermes. P. v. 5, p. 124–26. Rd Dec. 3.

————. Remarks on the nettling organs of the Hydra. P. v. 5, p. 119–21. Rd Dec. 10.

1851 WOODHOUSE, S. W. The North American jackal—Canis frustror. P. v. 5, p. 147–48. Rd Jan. 7.

Also in J. n. s. v. 2, pt. 2, art. 10, p. 87–8. Jan. 1852.

TAYLOR, R. C. Substance of notes made during a geological reconnoissance in the auriferous porphyry region next the Caribbean Sea, in the province of Veraguas and Isthmus of Panama. J. n. s. v. 2, pt. 2, art. 9, p. 81–6, map. Rd Jan. 7.

LEIDY, Joseph. Descriptions of new species of Entozoa. P. v. 5, p. 155–56. Rd Jan. 21.

HAZARD, J. P. Note on the arrival of the Rocky Mountain swallow near Point Judith, R. I., with some observations on its habits. P. v. 5, p. 141–42. Rd Jan. 21.

CASSIN, John. Sketch of the birds composing the genera Vireo, Vieillot, and Vireosylvia, Bonaparte, with a list of the previously known, and descriptions of three new species. P. v. 5, p. 149–54, 2 pl. Rd Feb. 11.

BERLANDIER, Louis. Description of two species of Mexican wolves—Canis Mexicanus & frustror. P. v. 5, p. 156–57. Rd Feb. 11.

CASSIN, John. Descriptions of new species of birds of the genera Galbula and Bucco, Briss. . . . P. v. 5, p. 154–55, 2 pl. Rd Feb. 18.

LEA, Isaac. . . . Examination of the fossil bones of a reptilian quadruped . . . from Upper Milford, Lehigh Co., Pa. . . . P. v. 5, p. 171–72. Rd Apr. 8.

LEIDY, Joseph. . . . Fossil tortoises from Nebraska territory. P. v. 5, p. 172–73. Rd Apr. 15 & 22.

CASSIN, John. Notes of an examination of the birds composing the family Caprimulgidae, in the collection of the Academy . . . P. v. 5, p. 175–90. Rd Apr. 22.

MASON, Francis. On some plants of Burmah . . . P. v. 5, p. 201–2. Rd May 13.

MITCHELL, J. K. On a fungus growing on a piece of decayed white-oak. P. v. 5, p. 210–11. Rd June 3.

MCCALL, G. A. Some remarks on the habits, etc., of birds met with in western Texas between San Antonio and the Rio Grande, and in New Mexico, with descriptions of several species believed to have been hitherto undescribed. P. v. 5, p. 213–24. Rd June 3.

OWEN, D. D., and SHUMARD, B. F. Descriptions of seven new species of Crinoidea from the Sub-Carboniferous limestone of Iowa and Illinois. J. n. s. v. 2, pt. 2, art. 11, p. 89–94, 1 pl. Rd July 15.

FISHER, J. C., and CASSIN, John. On a new species of Cicada; note on the above species, and on the C. Septendecim, Linn. P. v. 5, p. 272–75. Rd Aug. 12.

Leidy, Joseph. Fragments of fossil ruminant Ungulates from Nebraska Territory . . . P. v. 5, p. 237–39. Rd Aug. 19.

Cassin, John. Descriptions of new species of birds of the family Laniadae . . . P. v. 5, p. 244–46. Rd Aug. 19.

Dana, J. D. Conspectus Crustaceorum quae in orbis terrarum circumnavigatione, Carolo Wilkes e classe Reipublicae Faederatae duce. P. v. 5, p. 247–54, 267–72. Rd Aug. 19 & Sept. 16.

p. 267–72 contains the Paguridea.

Cont. rd Jan. 6, 1852 (below, q.v.).

Previous pts rd before Amer. Acad. A. & Sc. (1780), May 4, 1847 et seq. (q.v.). In its P. v. 1, p. 149–55; P. v. 2, p. 9–61, 201–20; 1848–50.

See also Wilkes Explor. Exped. (1838), v. 13–14. These were preliminary observations subsequently included in the volumes just noted.

Leidy, Joseph. . . . On Plumatella diffusa, Bosc. . . . P. v. 5, p. 261–62. Rd Sept. 9.

————. On the natural history of the family of Gordiaceae . . . P. v. 5, p. 262–63, 275. Rd Sept. 9.

————. . . . On Cristatella magnifica, Cuv. . . . P. v. 5, p. 265–66. Rd Sept. 16.

Le Conte, J. L. . . . A series of Tertiary fossils from San Diego, California . . . P. v. 5, p. 264–65. Rd Sept. 16.

————. An attempt to classify the longicorn Coleoptera of the part of America north of Mexico (cont). J. n. s. v. 2, art. 1, 13 & 18, p. 5–38, 99–112, 139–78. Rd Sept. 16 & Dec. 16.

Previous pt. rd Dec. 11, 1849 (above, q.v.).

Girard, Charles. Historical sketch of Gordiaceae. P. v. 5, p. 279–84. Rd Oct. 14.

Lea, Isaac. On the genus Acostaea of D'Orbigny, a fresh water Lamellibranchia. J. n. s. v. 2, pt. 2, art. 15, p. 125–31. Rd Oct. 21.

See also P. v. 5, p. 277.

Cassin, John. Catalogue of the Caprimulgidae in the Academy collection . . . P. v. 5, appx. 16 p. Rd Nov. 4.

Leidy, Joseph. Description of a new species of Crocodile from the Miocene of Virginia. J. n. s. v. 2, pt. 2, art. 17, p. 135–38, 1 pl. Rd Nov. 11.

See also P. v. 5, p. 308–9.

————. Some fossil bones from Miocene formation of Virginia. P. v. 5, p. 308–9. Rd Nov. 11.

(Balaena palae atlantica & B. prisca.)

Le Conte, J. L. Synopsis of the species of Donacia (Fabr.) inhabiting the U. S. P. v. 5, p. 310–16. Rd Nov. 11.

————. Zoological notes. P. v. 5, p. 316–20. Rd Nov. 11.

Leidy, Joseph. On some American fresh-water Polyzoa. P. v. 5, p. 320–22. Rd Nov. 18.

——————. Remarks on some fossil reptilian and mammalian remains. P. v. 5, p. 325–28. Rd Dec. 9.
See also p. 329–30.

Owen, D. D. Description of two new minerals and a new earth. J. n. s. v. 2, pt. 2, art. 19, p. 179–83. Rd Dec. 9.
See also P. v. 6, p. 379–80.

Cassin, John. Description of birds of the genera Laniarius, Dicrurus, Melanerpes, Sw., and Lanius, Linn. J. n. s. v. 2, pt. 3, art. 24, p. 257–58, 2 col. pl. Rd Dec. 16.

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Pt. 1. Turbellaria dendrocoela.
Pt. 2. Turbellarieorum Nemertineorum.
Pt. 3. Crustacea Maiodea.
Pts. 4–7. Rd Mar. 9, 1858 (q.v.).
Pt. 8. Rd Dec. 20, 1859 (q.v.).
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Pt. 3 Ophidians exotic to N. A.
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Pt. 4 Crustacea Cancroidea et Corystoidea
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Pt. 6 " Oxystomata
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no. 5 rd July 19, 1859 (q. v.)

no. 1 & 2 rd Feb. 3, 1857 (q. v.)

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Cassin, John. Description of a new Tanager (Calliste lavinia) from the Isthmus of Darien, and a note on Selenidera spectabilis, Cassin. P. v. 10, p. 177–78. Rd Sept. 21.

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LEA, Isaac. Descriptions of eight new species of Unionidae from Georgia, Mississippi and Texas. P. v. 11, p. 112–13. Rd April 5.

GILL, Theodore. On the genus Callionymus of authors. P. v. 11, p. 128–30. Rd April 5.

————. 1) Description of Hyporhamphus, a new genus of fishes allied to Hemirhamphus, Cuv; 2) On Dactyloscopus and Leptoscopus, two new genera of the family of Uranoscopidae. P. v. 11, p. 131; 132–33. Rd April 5.

————. Notes on a collection of Japanese fishes, made by Dr J. Morrow. P. v. 11, p. 144–49. Rd April 5.

MOSBLECH, P. W. Fossil fishes. . . . P. v. 11, p. 110. Rd Apr. 12.

COPE, E. D. On the primary divisions of the Salamandridae, with descriptions of two new species. P. v. 11, p. 122–28. Rd April 19.

LEIDY, Joseph. . . . 1) On fossil fishes. . . . ; 2) Guano containing fossil bones. P. v. 11, p. 110, 111. Rd Apr. 19.

LEA, Isaac. Descriptions of twenty-one new species of exotic Unionidae. P. v. 11, p. 151–54. Rd April 19.

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Lewis, James. Unionidae from Mohawk, N. Y. P. v. 11, p. 177. Rd July 12.

Holmes, F. S. On a collection of fossils from the Post-Pliocene of South Carolina. P. v. 11, p. 177–86. Rd July 12.

Letter by Agassiz, p. 185–86.

Binney, W. G. Notes on American land shells; no. 5. P. v. 11, p. 188–89. Rd July 19.

No. 6, rd May 8, 1860 (q. v.)
No. 3 & 4 rd May 4, 1858 (q. v.)

Xantus, John Catalogue of birds collected in the vicinity of Fort Tejon, California, with a description of a new species of Syrnium. P. v. 11, p. 189–93. Rd July 19.

Gill, Theodore. 1) Description of a type of Gobioids intermediate between Solinae and Tridentigerinae; 2) Description of a new South American type of Siluroids allied to Callophysis. P. v. 11, p. 195–96; 196–97. Rd Aug. 16.

Osten, Sacken, R., von. New genera and species of North American Tipulidae with short palpi, with an attempt at a new classification of the tribe. P. v. 11, p. 197–256, 2 pl. illus. Rd Aug. 16.

Appx. rd Jan. 10, 1860. In P. v. 12, p. 15–7.

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Leidy, Joseph. . . . Freyia Americana. . . . P. v. 11, p. 194. Rd Aug. 23.

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Clemens, Brackenridge. Contributions to America lepidopterology; no. 1 & 2. P. v. 11, p. 256–62, 317–28. Rd Sept. 20 & Nov. 15.

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Gabb, W. M. Descriptions of two new species of Carboniferous fossils brought from Fort Belknap, Texas, by Dr Moore. P. v. 11, p. 297. Rd Nov. 1.

Xantus, John. Description of supposed new species of birds from Cape San Lucas, lower California. P. v. 11, p. 297–99. Rd Nov. 8.

Baird, S. F. Notes on a collection of birds made by John Xantus at Cape St. Lucas, lower California, and now in the Smithsonian Institution. P. v. 11, p. 299–306. Rd Nov. 8.

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Le Conte, John. Description of a new species of the coleopterous family Histeridae. P. v. 11, p. 310–17. Rd Nov. 8.

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Stimpson, William. Prodromus descriptionis animalum evertebratorum quae in Expeditione ad Oceanum. . . . Pt. 8. P. v. 12, p. 22–47, 1 pl. Rd Dec. 20.

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*Carpenter, P. P. Shells at Cape San Lucas. P. v. 11, p. 331–32. Rd Dec. 20.

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No. 1–2, rd Sept. 20, 1859 (q. v.).

Gill, Theodore. 1) Notes on the nomenclature of North American fishes; 2) On the pertinence of the Alosa teres, DeKay to the genus Dussumiera, Val. P. v. 12, p. 19–21; 21–2. Rd Jan. 17.

*Oca, Rafael Montes de. The Mexican humming birds. P. v. 12, p. 47–8, 80–1, 551–53. Rd Jan. 24 & Feb. 21, & Dec.

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Anthony, J. G. Description of a new species of American fluviatile Gasteropoda. P. v. 12, p. 55–72. Rd Feb. 7.

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Pt. 1 Calamarinae.

Prime, Temple. Descriptions of new species of Cyrena and Corbicula in the cabinet of the Academy. . . . P. v. 12, p. 80. Rd Feb. [14].

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Wilson, Joseph. On a female whelp of a small ocelet (Felis pardalis minimus). P. v. 12, p. 82–4. Rd Mar. 6.

Lea, Isaac. 1) Description of four new species of Unionidae from Brazil and Buenos Ayres; 2) Descriptions of fifteen from Uruguay. P. v. 12, p. 89–90; 90–2. Rd Mar. 13.

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Gill, Theodore. Conspectus piscium in Expeditione ad oceanum Pacificum Septentrionalem. C. Ringgold et. J. Rodgers ducibus, a Gulielmo Stimpson collectorum; Sicydianae. P. v. 12, p. 100–2. Rd Apr. 3.

See also Rodgers & Ringgold Exped. (1853).

————. 1) Monograph of the genus Labrosomus, Sw.; 2) Monograph of the genus Labrax, Cuv.,; 3) Monograph of the Philypni. P. v. 12, p. 102–8; 108–19; 120–26. Rd Apr. 17.

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Leidy, Joseph. On a rich botanical locality at Jackson, N. Y. P. v. 12, p. 98. Rd Apr. 17.

Rogers, W. B. . . . On the structural and geological relations of the Albertite or so-called Albert coal of New Brunswick. P. v. 12, p. 98. Rd Apr. 17.

Simpson, J. H., Meek, F. B., and Engelman, Henry. Notice of geological discoveries in his recent explorations across the continent. P. v. 12, p. 126–31. Rd Apr. 17.

See also Simpson's Utah Exped. (1859).

Cassin, John. Catalogue of birds collected during a survey of a route for a ship canal across the Isthmus of Darien, by order of the government of the United States, made by Lieut. N. Michler . . . with notes and descriptions of new species. P. v. 12, p. 132–44, 188–97. Rd Apr. 17 & May 22.

See also Michler's Exped. to Isthmus Darien (1857).

Darrach, James. Plants appearing in flower in the neighborhood of Philadelphia, from February to May, etc. P. v. 12, p. 145–46, 199–201, 302–4. Rd May 1, June 5 & July 3.

Cont. rd Nov. 6, (below, q. v.).

Showalter, E. R. On Physa (gyrina). P. v. 12, p. 147. Rd May 8.

Smith, A. H. 1) On the habits of the beaver . . .; 2) On a black snake. . . . P. v. 12, p. 146–47; 149. Rd May 8 & 22.

Binney, W. G. Notes on American shells: no. 6. P. v. 12, p. 150–54. Rd May 8.

no. 5 rd July 19, 1859 (q. v. above).

————. Descriptions of new species of Pulmonata in the collection of the Smithsonian Institution. P. v. 12, p. 154. Rd May 8.

Lapham, I. A. A list of the shells of the state of Wisconsin. P. v. 12, p. 154–56. Rd May 8.

REDFIELD, J. H. Description of a new species of Marginella (roscida). P. v. 12, p. 174. Rd May 15.

MEEK, F. B., and HAYDEN, F. V. Descriptions of new organic remains from the Tertiary, Cretaceous and Jurassic rocks of Nebraska. P. v. 12, p. 175–85. Rd May 15.

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LEA, Isaac. Descriptions of fourteen new species of Schizostomae, Anculosae and Lithasiae. P. v. 12, p. 186–88. Rd May 22.

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CONRAD, T. A. . . . Notes on shells. P. v. 12, p. 231–32. Rd May 22.

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PRIME, Temple. Synonymy of the Cyclades, a family of acephalous Mollusca: pt. 1. P. v. 12, p. 267–301. Rd June 5.

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UHLER, P. R. Hemiptera of the North Pacific Exploring Expedition under Rodgers & Ringgold. P. v. 12, p. 221–31. Rd June 12.

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See also Rodgers & Ringgold Exped. (1853).

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HORN, G. H. Descriptions of three new species of Gorgonidae in the collection of the Academy. . . . P. v. 12, p. 233. Rd June 19.

LEA, Isaac. Descriptions of new species of Uniones . . . P. v. 12, p. 305–8. Rd July 3.

MEEK, F. B. Descriptions of new fossil remains collected in Nebraska and Utah, by the Exploring Expedition under . . . J. H. Simpson . . . P. v. 12, p. 308–15. Rd July 3.

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LE CONTE, J. L. Notes on Coleoptera found at Fort Simpson, Mackenzie River, with remarks on northern Georgia. P. v. 12, p. 315–21. Rd July 17.

————. Synopsis of the Scaphidiidae of the United States. P. v. 12, p. 321–24. Rd July 17.

GABB, W. M. Description of a new species of Cephalapod from the Eocene of Texas . . . P. v. 12, p. 324. Rd July 24.

ABBOTT, C. C. Descriptions of new species of American fresh water fishes. P. v. 12, p. 325–28. Rd Aug. 7.

KENNICOTT, Robert. Descriptions of new species of North American serpents in the Museum of the Smithsonian Institution. P. v. 12, p. 328–38. Rd Aug. 7.

COPE, E. D. Notes and descriptions of new and little known species of American reptiles. P. v. 12, p. 329–45. Rd Aug. 7.

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COPE, E. D. Descriptions of reptiles from tropical America and Asia. P. v. 12, p. 368–74. Rd Sept. 11.

LESLEY, J. P. On the White Mountains, N. H. . . . P. v. 12, p. 363–64. Rd Sept. 18.

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See also Page Exped. (1853) & Michler Exped. (1857).

Gill, Theodore. 1) Synopsis of the Carangoids of the eastern coast of North America; 2) Description of a new generic type of Mormyroids and note on the arrangement of the genus. P. v. 14, p. 430–43; 443–45. Rd Sept. 16.

Elliot, D. G. Remarks on the species composing the genus Pediocaetes, Baird. P. v. 14, p. 402–4. Rd Sept. 23.

Gill, Theodore. On the synonymy and systematic position of the genus Etelis of Cuvier and Valenciennes. P. v. 14, p. 445–49. Rd Sept. 23.

Tryon, G. W., Jr. 1) Description of a new genus and species of Pholadidae; 2) Notes on American fresh-water shells, with descriptions of two new species; 3) Monograph of the family Teredidae. P. v. 14, p. 449–51; 451–53; 453–82, pl. Rd Sept. 23.
"Monograph," contains bibliography, p. 457–59.

Kilvington, Robert. Cultivation of Arctic plants brought by Dr Hayes . . . P. v. 14, p. 482. Rd Oct. 7.
See also Hayes' Arctic Exped. (1860)

Slack, J. H. Monograph of the prehensile-tailed Quadrumana. P. v. 14, p. 507–19. Rd Oct. 7.

Gabb, W. H. Description of a new species of Cephalopod from the coast of California. P. v. 14, p. 483, 1 pl. Rd Oct. 14.

Gill, Theodore. 1) On the classification of the families and genera of the Squali of California; 2) On the limits and affinity of the family of Leptoscopoids. P. v. 14, p. 483–501; 501–6. Rd Oct. 21.

Le Conte, J. L. 1) Synopsis of the species of Colymbetes inhabiting America, north of Mexico; 2) Note on the species of Brachinus inhabiting the United States. P. v. 14, p. 521–23; 523–25. Rd Nov. 4.

Warner, John. Contributions to organic morphology: containing the mathematical imitation of the egg of Planorbis corneus and of Epiornus; and upon the resemblances between mathematical, acoustic, electric, optical and organic figures; with historical and other remarks. P. v. 14, p. 525–35. Rd in Nov.

Coues, Elliott. A review of the Terus of North America. P. v. 14, p. 535–59. Rd in Nov.

Winchell, Alexander. Descriptions of fossils from the Yellow sandstones lying beneath the ''Burlington limestone,'' at Burlington, Iowa. P. v. 15, p. 2–25. Rd Dec. 23.

Conrad, T. A. 1) Catalogue of the Miocene shells of the Atlantic slope; 2) Descriptions of new, recent and Miocene shells. P. v. 14, p. 559–82, 586; 583–86. Rd in Dec.

Lewis, James. Remarks on some species of Paludina, Amnicola, Valvata, and Melania. P. v. 14, p. 587–94. Rd in Dec.

1863 Gill, Theodore. Systematic arrangement of the Mollusks of the family Viviparidae, and others, inhabiting the United States. P. v. 15, p. 33–40. Rd Feb. 3.

Coues, Elliott. Additional remarks on the North American Aegiothi. P. v. 15, p. 40–1. Rd Feb. 10.

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Gray, Asa. Enumeration of the species of plants collected by Dr C. C. Parry, Elihu Hall and J. P. Harbour . . . in 1862 on and near the Rocky Mountains, in Colorado territory, lat. 39°–41°. P. v. 15, p. 55–80. Rd Mar. 3.

Cope, E. D. On Trachycephalus, Scaphiopus, and other American Batrachia. P. v. 15, p. 43–45. Rd Mar. 10.

Lea, Isaac. New Melanidae of the United States. J. n. s. v. 5, pt. 3, art. 6, p. 217–356, 6 pl. [229 fig.]. Pub. Mar. 17.

Gill, Theodore. Descriptions of some new species of Pediculati, and on the classification of the group. P. v. 15, p. 88–92. Rd in Mar.

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See also Hayes' Arctic Exped. (1860).

*Grant, J. A. On the willow grouse. P. v. 15, p. 98–9. Rd Mar. 24.

Cope, E. D. Descriptions of new American Squamata, in the Museum of the Smithsonian . . . P. v. 15, p. 100–6. Rd Apr. 7.

Lawrence, G. N. Descriptions of the new species of the families Vireonidae and Rallidae. P. v. 15, p. 106–7. Rd Apr. 7.

Wood, H. C., Jr. On the Pedipalpi of North America. J. n. s. v. 5, pt. 4, art. 7, p. 357–76, 1 pl. Rd Apr. 7.

Abstract in P. v. 15, p. 107–12.

Coues, Elliott. On the Lestris Richardsoni of Swainson; with a critical review of the subfamily Lestridinae. P. v. 15, p. 121–38. Rd May 5.

*Jones, T. R. On fossil Estheriae and on Cypricardia Leidyi. P. v. 15, p. 188. Rd May 5.

Stimpson, William. Synopsis of the marine Invertebrata, collected by the late Hayes' Arctic Expedition. P. v. 15, p. 138–42. Rd May 12.

See also Hayes' Arctic Exped. (1860).

Lea, Isaac. New exotic Unionidae. J. n. s. v. 5, pt. 4, art. 8, p. 377–400, 10 pl. Rd May 12.

Collected in South America by Jeffries Wyman.

——————. Descriptions of the soft parts of 143 species and some embryonic forms of Unionidae of the United States. J. n. s. v. 5, pt. 4, art. 9, p. 401–56. Rd May 12.

Wilson, T. B., and Cassin, John. On a third kingdom of organized beings. P. v. 15, p. 113–21. Rd May 19.

Tryon, G. W., Jr. Contributions towards a monography of the order of Pholodacea, with descriptions of new species: no. 2. P. v. 15, p. 143–46, illus. Rd May 19.

Tryon, G. W., Jr. Descriptions of two new species of fresh-water Mollusca from Panama; description of a new exotic Melania. P. v. 15, p. 146–47, illus. Rd May 19.

——————. Descriptions of new species of fresh-water Mollusca, belonging to the families Amnicolidae, Valvatidae and Limnaeidae, inhabiting California. P. v. 15, p. 147–50, illus. Rd May 19.

Lea, Isaac. Descriptions of fourteen new species of Melanidae and one Paludina. P. v. 15, p. 154–56. Rd May 19.

March, W. T., and Baird, S. F. Notes on the birds of Jamaica, by March; with remarks by S. F. Baird; Pt. 1 & 2. P. v. 15, p. 150–54, 283–304. Rd May 19 & Nov. 10.

Pt. 3 in P. v. 16, p. 62–72. Rd Mar. 15, 1864.

Kennicott, Robert. Descriptions of four new species of Spermophilus, in the collections of the Smithsonian Institution. P. v. 15, p. 157–58. Rd June 2.

Lea, Isaac. 1) Description of eleven new species of exotic Unionidae; 2) Descriptions of twenty-four new species of Unionidae of the United States. P. v. 15, p. 189–90; 191–94. Rd June 16.

Gill, Theodore. Descriptive enumeration of a collection of fishes, from the western coast of Central America, presented by Capt. J. M. Dow to the Smithsonian Institution. P. v. 15, p. 162–74. Rd June 23.

See also U. S. Nat. Mus. Proc. v. 5, p. 373–78. 1882 (Jordan & Gilbert).

Brevoort, J. C. Enumeration of the fish described and figured by Parra, scientifically named by Felipe Poey, translated and edited by J. C. Brevoort. P. v. 15, p. 174–80. Rd June 23.

*Poey, Felipe. Descriptions des Poissons nouvelles ou peu connues. P. v. 15, p. 180–88. Rd June 23.

Gill, Theodore. 1) Description of a new species of Choerojulis from North Carolina; 2) On an unnamed generic type allied to Sebastes. P. v. 15, p. 205–7; 207–9. Rd July 21.

Cassin, John. Notes on the Picidae, with descriptions of new and little known species. P. v. 15, p. 194–204, 322–28. Rd July 21 & Sept. 22.

Gill, Theodore. Description of a new generic type of Ophidioids. P. v. 15, p. 209–11. Rd Aug. 18.

————. 1) Synopsis of the family of Lepturoids, and a description of a remarkable new generic type; 2) Synopsis of the North American Gadoid fishes. P. v. 15, p. 224–29; 229–42. Rd Sept. 1.

————. 1) Description of the genera Gadoid and Brotuloid fishes of western North America; 2) Synopsis of the family of hycodoidae. P. v. 15, p. 242–54; 254–62. Rd Sept. 1.

Haldeman, S. S. On Strepomatidae as a name for a family of fluviatile Mollusca, usually confounded with Melania. P. v. 15, p. 273–74. Rd Sept. 1.

Porter, T. C. Mollusca from Juniata River, Pa. P. v. 15, p. 212. Rd Sept. 8.

Gill, Theodore. 1) Synopsis of the Pomacentroids of the western coast of North and Central America; 2) Notes on the Labroids of the western coast of North America. P. v. 15, p. 213–21; 221–24. Rd Sept. 8.

————. 1) Descriptions of the Gobioid genera of the western coast of temperate North America; 2) On the Gobioids of the eastern coast of the United States. P. v. 15, p. 262–67; 267–71. Rd Sept. 22.

————. 1) On the genus Periophthalmus of Schneider; 2) Note on the genera of Hemirhamphinae. P. v. 15, p. 271–72; 272–73. Rd Sept. 22.

Abbott, C. C. Description of a collection of jasper lance-heads found near Trenton, N. J.; and remarks on the locality, with reference to Indian antiquities. P. v. 15, p. 278–79. Rd Sept. 22.

Cassin, John. Descriptions of new and little known species of birds of the family Picidae in the Academy Museum . . . J. n. s. v. 5, pt. 4, art. 10, p. 457–61, 2 col. pl. Rd Sept. 22.

Also in P. v. 15, p. 322–28.

Tryon, G. W., Jr. 1) Description of a new species of Pleurocera; 2) Description of a new species of Teredo, from New Bedford, Mass.; 3) Descriptions of two new species of Mexican land shells. P. v. 15, p. 279–81. Rd Oct. 20.

Tryon, G. W., Jr. Synonymy of the species of Strepomatidae, a family of fluviatile Mollusca, inhabiting North America: Pt. 1. P. v. 15, p. 306–22. Rd Nov. 17.

Pts. 2–3 rd Feb. 2, 1864 (q.v.).

Pt. 4 rd Jan. 24, 1865 (q.v.).

Gill, Theodore. 1) Description of the genus Stereolepis, Ayres; 2) Description of the genus Oxyjulis, Gill; 3) Note on some recent additions to the ichthyological fauna of Massachusetts; 4) Note on the species of Sebastes of the eastern coast of North America. P. v. 15, p. 329–30; 330–31; 332–33; 333–35. All rd Nov. 17.

Hill, Richard. Notes on the Mimidae of Jamaica. P. v. 15, p. 304–5. Rd in Nov.

Lewis, F. W. On some new and singular intermediate forms of Diatomaceae. P. v. 15, p. 336–46. Rd Dec. 8.

Gray, Asa. Synopsis of the species of Hosackia. P. v. 15, p. 346–52. Rd Dec. 15.

Agassiz, Alexander. Synopsis of the Echinoids collected by Dr William Stimpson, on the U. S. North Pacific . . . expedition under Rodgers and Ringgold. P. v. 15, p. 352–61. Rd Dec. 22.

See also Rodgers & Ringgold Exped. (1853).

1864 Coues, Elliott. The crania of Colymbus torquatus and C. Adamsii compared. P. v. 16, p. 21–2. Rd Jan. 5.

Lea, Isaac. 1) Description of a new genus of the family; 2) Descriptions of eleven new species of indigenous Melanidae; 3) Descriptions of and remarks on Planorbis Newberryi. P. v. 16, p. 2–5. Rd Jan. 12.

Wood, H. C., Jr. 1) Descriptions of new species of North American Polydesmidae; 2) Descriptions of new species of North American Julidae. P. v. 16, p. 6–10; 10–6. Both rd Jan. 12.

Canby, W. M. Notes of botanical visits to the lower part of Delaware and the eastern shore of Maryland. P. v. 16, p. 16–9. Rd Jan. 19.

Elliott, D. G. Remarks upon a proposed arrangement of the family of grouse, and new genera added. P. v. 16, p. 23. Rd Feb. 2.

Tryon, G. W., Jr. Synonymy of the species of Strepomatidae, a family of fluviatile Mollusca, inhabiting North America: Pts. 2–3. P. v. 16, p. 24–48, 92–104. Rd Feb. 2 & Mar. 1.

Pt. 1 rd Nov. 17, 1863 (q.v.).
Pt. 4 rd Jan. 24, 1865 (q.v.).

Gill, Theodore. 1) Description of a new Labroid genus allied to Trochocopus, Gthr.; 2) Note on the nomenclature of genera and species of the family Echeneidoidae. P. v. 16, p. 57–9; 59–61. Rd in Feb.

Helmuth, C. A. New species of Mordellistena collected in Illinois. P. v. 16, p. 105. Rd Mar. 15.

Gill, Theodore. 1) Critical remarks on the genera Sebastes and Sebastodes of Ayres; 2) Second contribution to the Selachology of California. P. v. 16, p. 145–47; 147–51. Rd Mar. 22.

Lawrence, G. N. Descriptions of new species of birds of the families Caerebidae, Tanagridae, Icteridae, and Scolopacidae. P. v. 16, p. 106–8. Rd in March.

Coues, Elliott. A critical review of the family Procellaridae. P. v. 16, p. 72–91, 116–44. Rd Apr. 12.

Pt. 1. Embracing the Procellarieae, or stormy petrels, based principally on specimens in the Museum of the Smithsonian Institution.
Pt. 2. Embracing the Puffineae.

Lea, Isaac. 1) Description of six new species of Succinea of the United States; 2) Descriptions of thirteen new species of Melanidae of the United States. P. v. 16, p. 109–11; 111–13. Rd April 12.

————. Descriptions of six new species of Unionidae from Lake Nyassa, Central Africa. P. v. 16, p. 108–9, 113. Rd April 12 & 19.

————. 1) Description of five new species of Lymnaea of North America; 2) Descriptions of twenty-four new species of Physa of the United States and Canada. P. v. 16, p. 113; 114–16. Rd April 19.

Cassin, John. Notes of an examination of the birds of the subfamily Coerebinae. P. v. 16, p. 265–75. Rd April 19.

Stimpson, William. Descriptions of new species of marine Invertebrata from Puget Sound, collected by the naturalists of the Northwest boundary commission, H. H. Campbell, commissioner. P. v. 16, p. 153–61. Rd May 24.

See also Northwest Boundary Survey (1857).

Winchell, Alexander. Description of a gar-pike, supposed to be new, Lepidosteus (Cylindrosteus) oculatus. P. v. 16, p. 183–87. Rd July 12.

Cope, E. D. Contributions to the Herpetology of tropical America. P. v. 16, p. 166–81. Rd July 19.

————. On the limits and relations of the Raniformes. P. v. 16, p. 181–83. Rd Aug. 23.

Wood, H. C., Jr. Description of new genera and species of North American Myriapoda. P. v. 16, p. 186–87. Rd Sept. 6.

Gill, Theodore. 1) Note on the Paralepipoids and Microstomatoids, and on some peculiarities of Arctic ichthyology; 2) Synopsis of the Cyclopteroids of eastern North America; 3) Synopsis of the Pleuronectoids of California and north western America. P. v. 16, p. 187–89; 189–94; 194–98. All rd Sept. 6.

————. Description of a new generic type of Pleuronectoids in the collection of the Geological Survey of California. P. v. 16, p. 198–99. Rd Sept. 20.

See also Cal. Geol. Survey (1853).

————. 1) On the affinities of several doubtful British Fishes; 2) Note on the family of Stichaeoids. P. v. 16, p. 199–208; 208–11. Rd Sept. 20.

Conrad, T. A. Notes on shells, with descriptions of new fossil genera and species. P. v. 16, p. 211–14, illus. Rd Sept. 20.

Gill, Theodore. 1) Synopsis of the Pleuronectoids of the eastern coast of North America; 2) Descriptions of new genera and species of eastern American Pleuronectoids. P. v. 16, p. 214–20; 220–24. Both rd Sept. 20.

Cope, E. D. 1) On the characters of the higher groups of Reptilia Squamata and especially of the Diploglossa; 2) On a blind Silurid, from Pennsylvania. P. v. 16, p. 224–31; 231–34. Rd Oct. 4.

Cassin, John. Fasti Ornithologiae. P. v. 16, p. 234–57. Rd Oct. 18.
No. 1 Philipp Ludwig Statius Müller.

Gill, Theodore. Synopsis of the eastern American sharks. P. v. 16, p. 258–65. Rd Nov. 22.

Cope, E. D. Partial catalogue of the cold-blooded Vertebrata of Michigan: Pt. 1. P. v. 16, p. 276–85. Rd Dec. 20.
Cont. in P. v. 17, p. 78–88. Rd May 2, 1865.

Lea, Isaac. Description of six new species of western Asiatic Unionidae. P. v. 16, p. 285–86. Rd Dec. 20.

Cassin, John. Notes on some species of birds from South America. P. v. 16, p. 286–88, 4 col. pl. Rd Dec. 20.

1865 Lewis, F. W. On extreme and exceptional variations of Diatoms, in some White Mountain localities. P. v. 17, p. 7–18. Rd Jan. 3.

Tryon, G. W., Jr. Synonymy of the species of Strepomatidae, a family of fluviatile Mollusca, inhabiting North America: Pt. 4. P. v. 17, p. 19–36. Rd Jan. 24.
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Pt. 2–3 rd Feb. 2, 1864 (q.v.).

Cassin, John. Notes on some new and little known rapacious birds. P. v. 17, p. 2–5. Rd in Jan.

Cooper, J. G. On a new Cormorant from the Farallone Islands, California. P. v. 17, p. 5–7. Rd in Jan.
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Lawrence, G. N. Descriptions of new species of birds of the families Paridae, Vireonidae, Tyrranidae and Trochilidae, with a note on Myiarchus panamensis. P. v. 17, p. 37–9. Rd Feb. 14.

Meek, F. B., and Worthen, A. H. Notice of some new types of organic remains, from the coal measures of Illinois. P. v. 17, p. 41–52. Rd Mar. 21.
See also Illinois Geol. Survey (1851).

*Carpenter, P. P. Diagnoses specierum et varietatum novarium Molluscorum, prope sinum Pugetianum a Kennerlio Doctore nuper decesso collectorum. P. v. 17, p. 54–64. Rd April 4.
See also Northwest Boundary Survey (1857).

Gill, Theodore. 1) Synopsis of the genus Pomoxys, Raf.; 2) On the genus Caulolatilus; 3) On the cranial characteristics of Gadus proximus, Grd. P. v. 17, p. 64–6; 66–9; 69. Rd Apr. 11.
Note on several genera of Cyprinoids, p. 69–70.

Conrad, T. A. 1) Observations on the Eocene lignite formation of the United States; 2) Catalogue of the Eocene Annulata, Foraminifera, Echinodermata and Cirrepedia of the United States. P. v. 17, p. 70–3; 73–5. Rd Apr. 18.
Description of a new species of Echinidae, p. 75.

Lea, Isaac. Descriptions of three new species of exotic Uniones. P. v. 17, p. 75–6. Rd Apr. 18.

Cope, E. D. Partial catalogue of the cold-blooded Vertebrata of Michigan. P. v. 17, p. 78–88. Rd May 2.
Pt. 1 rd Dec. 20, 1864 (q.v. above).

Lea, Isaac. Descriptions of eight new species of Unio of the United States. P. v. 17, p. 88–9. Rd May 16.

Cassin, John. An examination of the birds of the genus Chrysomitris in the Academy Museum . . . P. v. 17, p. 89–94. Rd May 23.

*Gunther, Albert. Some remarks on the Labrus pulcher (Ayres). P. v. 17, p. 77. Rd May 30.

Winchell, Alexander. Descriptions of new species of fossils from the Marshall group of Michigan and its supposed equivalent, in other states, with notes on some fossils of the same age previously described. P. v. 17, p. 109–33. Rd June 6.

Leidy, Joseph. Teeth of horses from California. P. v. 17, p. 94. Rd June 6.

Le Conte, J. L. 1) Note on the species of Myodites Latr. inhabiting the United States; 2) Notes on the species of Harpalus inhabiting North America, north of Mexico. P. v. 17, p. 96–8; 98–104. Rd June 20.

Gill, Theodore. On a new genus of Serraninae. P. v. 17, p. 105–6. Rd June 20.

Helmuth, C. A. New species of Mordellidae collected in Illinois. P. v. 17, p. 96. Rd June 27.

Lawrence, G. N. Descriptions of four new species of birds from the Isthmus of Panama, New Granada. P. v. 17, p. 106–8. Rd in June.

Meek, F. B., and Worthen, A. H. Descriptions of new Crinoidea, etc., from the Carboniferous rocks of Illinois and some of the adjoining states. P. v. 17, p. 155–66. Rd July 11.
See also Illinois Geol. Surv. (1851).

Meek, F. B. Note on the genus Gilbertsocrinus, Phillips. P. v. 17, p. 166–67. Rd July 11.

Cope, E. D. On Amphibamus Grandiceps, a new Batrachian from the coal measures. P. v. 17, p. 134–37. Rd July 18.

Meek, F. B., and Worthen, A. H. Remarks on the genus Taxocrinus, (Phillips) McCoy, 1844; and its relations to Forbesiocrinus, Koninck and LeHon, 1854, with descriptions of new species. P. v. 17, p. 138–43. Aug. 1.

————. Descriptions of new species of Crinoidea, etc., from the Palaoezoic rocks of Illinois and some of the adjoining states. P. v. 17, p. 143–55. Rd Aug. 1.
See also Illinois Geol. Surv. (1851).

Cope, E. D. Note on a species of whale occurring on the coasts of North America. P. v. 17, p. 168–69. Rd Aug. 8.

Cassin, John. On some Conirostral birds from Costa Rica in the collection of the Smithsonian Institution. P. v. 17, p. 169–72. Rd Aug. 8.

Wood, H. C., Jr. New Polyzoniidae, Gervais. P. v. 17, p. 172–73. Rd Aug. 15.

Allen, Harrison. On a new genus of Vespertilionidae. P. v. 17, p. 173–75. Rd Aug. 15.

Gill, Theodore. 1) On two species of Delphinidae, from California in the Smithsonian Institution; 2) Note on a species of hunch-back whale. P. v. 17, p. 177–78; 178–81. Rd Sept. 19.

Leidy, Joseph. 1) Some fossil remains of Rhinoceros from Texas & Cal.; 2) Bones from Orchilla, W. I. P. v. 17, p. 176–77; 181–83. Rd Sept. 19 & Oct. 10.

Conrad, T. A. Observations on American fossils, with descriptions of two new species. P. v. 17, p. 184. Rd Oct. 17.

Cope, E. D. Third contribution to the Herpetology of tropical America. P. v. 17, p. 185–98. Rd Oct. 17.

————. A contribution to a knowledge of the Delphinidae; 2 pts. P. v. 17, p. 198–204, 278–81. Rd Oct. 17 & Dec. 12.

Le Conte, J. L. On the species of Galeruca and allied genera inhabiting North America. P. v. 17, p. 204–22. Rd Oct. 24.

Le Conte, J. L. Prodromus of a monograph of the species of the tribe Anobiini, of the family Ptinidae, inhabiting North America. P. v. 17, p. 222–44. Rd Oct. 24.

Meek, F. B., and Worthen, A. H. Contributions to the Paleontology of Illinois and other western states. P. v. 17, p. 245–73. Rd Nov. 14.
See also Illinois Geol. Surv. (1851).

Meek, F. B. Observations on the microscopic shell structure of Spirifer cuspidatus, Sowerby, and some similar American forms. P. v. 17, p. 275–78. Rd Dec. 5.

Cope, E. D. 1) On a seal . . . from . . . Cambridge, Maryland; 2) Crania of Cetaceans of our coast . . . ; 3) On geographical distribution of fishes . . . P. v. 17, p. 273–74. Rd Dec. 12 & 19.

LITERARY AND PHILOSOPHICAL SOCIETY OF SOUTH CAROLINA, CHARLESTON (1813)

History

"At the commencement of the year 1813, the author submitted to a select number of his friends, the outlines of a constitution, for organizing a Society to be called the 'Antiquarian Society of Charleston.' The objects of this Society were to be, primarily, the collection, arrangement and preservation of specimens in natural history; and of things rare, antique, curious and useful; and secondarily, the promotion and encouragement of the arts, sciences and literature, generally.''

''On the 20th of May, 1813, the following gentlemen agreed to associate for the above purposes, and signed their names to the original outlines for a constitution. . . . Drs Richard L. Latham, John L. E. W. Shecut, Isaac A. Johnson, John S. Trescott and John Grimke. Their first meeting as a Society was held on the 31st of the same month at which further measures were debated on, for the advancement of the Society.''

''At their meeting of the 14th of June following, Dr James E. B. Finley, Stephen Elliott, Dr. David Ramsay, the Honourable John Drayton, the Honourable Thomas Bennett, Benjamin Elliott, and Dr Alexis De Carandefez, attached themselves to the Society as members.''

''. . . On the 30th of June . . . by the votes of a majority of the members present, the name of the Society was altered to that of the Literary and Philosophical Society of South Carolina, by which name it was incorporated in the year 1814.''

''The surprising progress of this Society is a guarantee that the citizens of Charleston are awakening from their slumber to the active promotion of science and literature; but this rapid progress was to be expected from the happy choice of the Society in selecting Stephen Elliott, as their President . . .''

''The objects of this Association were no sooner publicly known, than numerous donations of specimens, in every department of the arts and sciences were liberally bestowed, with which to commence its museum. These with the cases and the collection presented by the Charleston Library in 1814, began to assume a respectable and very flattering appearance.

''The opportune arrival of that distinguished naturalist and practical chemist, Dr Felix L'Herminier, from Guadaloupe, with an extensive collection of specimens, the fruit of twenty years application, expense and industry, which he offered to the Society, was an advantage not to be lost sight of. Negotiations were immediately entered into with that gentleman, by a Committee of the Society. The citizens were also invited to co-operate with them in effecting the purchase of this collection, towards the establishment of a respectable and scientific museum in Charleston.''

''Those persons who subscribed fifty dollars, on payment of that sum, became members for life. The state legislature and the city council, alive to the importance of this object, with a promptness and liberality . . . contributed largely towards the purchase, and with the sums subscribed by individuals enabled the Society to make a purchase of that valuable collection, which is now one of the chief, and perhaps most interesting ornaments of the city.''

''The superior personal attention and talents of Dr L'Herminier were also enlisted in behalf of the Society, by being appointed Superintendent of the Museum. This was also an acquisition of importance; his practical knowledge in every department of science . . . had already given a character . . . which cannot fail to ensure its future progress.''

''. . . Our distinguished fellow-citizen, the Hon. Thomas Sumpter, minister, resident at Brazils, has lately enriched the Museum of the Society, by presenting it with an extensive, splendid and very valuable collection of minerals, birds, and insects of Chili, and the Brazils. The Society are also in a very especial manner indebted to the Hon. Joel R. Poinsett, the Hon. Henry Middleton, Stephen Elliott, Esq., Messrs Maclure, Caradeaux . . . for their valuable donations of specimens in natural history, and for which their names have been honourably mentioned in the Journals of the Society.''

''If allowances are made for the climacteric, or constitutional apathy, that has always, to a certain degree, prevailed among the natives of warm climates, the Society may be said to be in a flourishing condition. It consists of 138 members, many of whom are of the first standing in society, and of acknowledged literary and scientific talents. Its museum is rich in extensive collections of minerals, fossils and shells. The departments of zoology, particularly those of ornithology, herpetology, ichthyology, and entomology, are extensively filled. It is also rich in coins, medals and castings . . .''

''The Library of the Society being for the most part confined to books of science, is yet in its infancy. . . . A fund is appropriated towards its particular establishment, which has been enriched by a donation of 750 dollars from John Blake White, Esq., one of its members . . .'' The above citations are taken from SHECUT, J. L. E. W. Medical & Philosophical Essays. 1819. p. 49–52. (See Bibliography below.)

The collections from the Charleston Library Society referred to above, belonged to the Charleston Museum (1773), q.v., and in 1827, were turned over to the Medical College of the state of South

Carolina, owing to the inability of the Society to erect its own building for the housing of the Museum.

On August 14, 1814, Stephen Elliott, the president of the Society, delivered his ''Address'' on the objects and the importance of the Association. The Society maintained an inactive and precarious existence for many years, lasting until the early forties. Upon the death of Elliott in 1830, John Bachman became the presiding officer.

Bibliography

1819 SHECUT, J. L. E. W. The Literary and Philosophical Society of South Carolina . . . Charleston, 1819. (In his Medical & philosophical essays. p. 49–52).

1906 WILLIS, Eola. History of the Museum; sketch of the life of Dr J. L. E. W. Shecut and of the origin of the Museum. (In College of Charleston. Musuem. Bull. v. 2, p. 27–32. Apr. 1906).

Refers to the Charleston Museum, founded in 1773 (q.v.).

1907 MAZYCK, William G[aillard]. History of the Museum: the period from 1798 to 1850. (In Charleston Mus. Bull. v. 3, no. 7, p. 57–66. Nov. 1907).

1915 REA, Paul Marshall. History of the Museum (cont.): the collections of the Charleston Library Society from 1798 to 1815. (In College of Charleston. Museum. Bull. v. 2, no. 6, p. 47–54. Oct. 1906).

————. A contribution to early museum history in America. (In Amer. Assoc. Mus. Proc. v. 9, p. 53–65. 1915).

The whole story of the Charleston Museum from its origin in 1773.

Papers on Natural History

1814 ELLIOTT, Stephen. An address to the Literary and Philosophical Society of South-Carolina; delivered in Charleston, on Wednesday, the 10th of August, 1814. Charleston, Printed by W. P. Young, 1814. 20 p.

''On the objects and importance of the Association.''
Discusses the reasons for the study of the sciences of mineralogy, zoology and botany, on p. 5–10.

1833 BACHMAN, John. On the migration of the birds of North America. Rd Mar. 15.
In Amer. J. Sc. (1818), v. 30, no. 1, p. 81–100. Apr. 1836.

PITTSBURGH CHEMICAL & PHYSIOLOGICAL SOCIETY (1813)

History

This Society was organized on October 29, 1813, and maintained an active existence for a little over a year, disbanding in December, 1814. Its president was Walter Forward, and amongst its lecturers on natural history subjects were M. M. Murray, and F. Aigster who lectured on botany and mineralogy respectively. The Society made a respectable mineralogical collection and formed a small museum. See below the article by O'Connor, in which is given a list of the officers and the various departments of the Society. The Society appears to have been interested primarily in chemistry, and only incidentally in natural history.

Bibliography

1916 O'CONNOR, John, Jr. Pittsburgh's first chemical society. (In Science. n. s. v. 44, p. 11–4. July 7, 1916).

LINNAEAN SOCIETY OF NEW ENGLAND, BOSTON (1814)

History

The LINNAEAN SOCIETY OF NEW ENGLAND was formed on the eighth of December, 1814, under the name of the "New England Society for the Promotion of Natural History," at Boston, in the rooms of Dr Jacob Bigelow. The officers elected at the initial meeting were John Davis, president, Jacob Bigelow, corresponding secretary, J. W. Webster, cabinet-keeper, and W. S. Shaw, Octavius Pickering, D. Cushing, J. F. Dana in other capacities. (For a complete list of officers during the period of the Society's existence, see BOUVE, below, in the Bibliography.)

The name of the Society was changed on January 21, 1815, to the LINNAEAN SOCIETY OF NEW ENGLAND. Its Act of Incorporation was procured from the State Legislature in 1820. On December 29, 1814, the Museum of the Society was officially begun. Arrangements were made whereby the Museum was open free of charge to the public, and M. Duchesne was engaged to care for it.

Active meetings were held for several years at which scientific papers on natural history were read (a list of which may be found below under Papers on Natural History), and many specimens presented to the Museum. At a meeting held June 18, 1817, a "Report" by a Committee was read concerning the sea-serpent supposed to have been observed on the Massachusetts shores. (See Papers: 1817, below.) This "Report" of 52 pages constituted its only publication during the course of its existence.

The Society languished until 1822 or thereabouts and its gradual dissolution came about shortly thereafter. The collections under a special agreement were transferred to the authority of Harvard College, but were finally placed in the hands of the officers of the newly formed Boston Society of Natural History (1830), at its organization in 1830.

Many of the members active in the Linnaean Society joined the new Society. A Record Book of the business, officers, specimens, etc., of the Linnaean Society is in the Library of the Boston Society of Natural History.

A noteworthy activity of the Society was the organization of out-of-town field meetings, which were regarded as very successful for the period.

Excellent accounts of the Linnaean Society are given in both Gould and Bouve in the Bibliography, cited below.

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1863 GOULD, Augustus Addison. . . . The Linnaean Society of New England. (In Bost. Soc. Nat. Hist. Proc. v. 9, p. 335–40. Nov. 18, 1863).

1880 BOUVE, Thomas Tracy. . . . Historical sketch of the Boston Society of Natural History; with a notice of the Linnaean Society which preceded it. (In Bost. Soc. Nat. Hist. Anniversary Memoirs: 1830–1880. 1880. p. 3–14).

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Taken from Gould's Account (See Bibliography above).

1815 Dana, J. F. Analysis of the incrustation formed on the basket of eggs from Derbyshire. Rd Jan. 21.

——————. Account of the Ichnuemon atrator. Rd Feb. 11.

Davis, [John]. On the advantages of natural history and the objects of this institution. Rd June 21.

Goodwin. Account of tadpoles in Sandwich. Rd in Nov.

1816 Davis, [John]. Account of several insects from China.

Bigelow, Jacob. Some account of an expedition to the White Mountains, undertaken by himself and a few other members of the Society. Rd in August.
In New England Jour. Medicine. v. 5, p. 321–28. 1816.

Dana, J. F. Observations on the Monadnock Mountain.

Ware, John. Dissection of two pigs preternaturally united. Rd in Dec.

1817 Hayward, George. Description of an elk, and the appearance on dissection. Rd in Jan.

Dana, S. L. On the geology and mineralogy of Cambridge and the vicinity. Rd in April.

Linnaean Society of New England. Report of a Committee of the . . . relative to a large marine animal supposed to be a serpent, seen near Cape Ann, Massachusetts. Bost. Cummings & Hilliard, August, 1817. 52 p. (Rd in Sept. & Oct.)
"This was the magnum opus of the Society, and the only one published under its auspices in a separate form. It was in an octavo of 52 p. and 2 copper plates illustrating the form and dissection of a smaller specimen supposed to be the young." Gould. p. 340. See also note by Wyman, p. 245 of the Proc. v. 9, 1863. Another ed. London, 1818. 59 p.

1818 Webster, J. W. On the mineralogy and geology of the Island of St. Michael's. Rd in August.

LITERARY AND PHILOSOPHICAL SOCIETY OF NEW YORK, NEW YORK CITY (1814)

History

The Literary and Philosophical Society of New York was founded in January, 1814, and incorporated by an act of the New York State Legislature on March 25, 1815. On May 4, 1814, the president of the Society, De Witt Clinton, delivered his famous "Introductory Discourse," in which he reviewed the achievements of the country up to that time in the arts, science, etc. (see Papers: 1814, Clinton, below).

The Society remained in existence until the late twenties, with De Witt Clinton serving as president during the entire period.

Nearly all its officers were either active naturalists or else very much interested in the pursuit of natural history. In 1815, the officers were as follows: President, De Witt Clinton; David Hosack, vice-president; Cadwallader D. Colden, John Griscom and Archibald Bruce, counsellors; Hugh Williamson and Samuel L. Mitchill, corresponding secretaries; James Renwick, and Jacob Van Den Heuvel, recording secretaries; John Pintard, J. W. Francis, curators; Thomas Eddy, treasurer. In 1825, they were: Clinton, president; Hosack, Mitchill and Renwick, vice-presidents; John B. Beck and J. W. Francis, corresponding secretaries; Jeremiah Van Rensselaer and William B. Lawrence, recording secretaries; J. E. De Kay, Robert Greenhow, curators; and Henry Brevoort, treasurer. Samuel W. Moore and Jacob Dyckman also served as curators for a time.

In 1815, the Society published its first volume of Transactions, a quarto of 570 pages. In 1825, part 1 of the second volume of Transactions was published. The articles pertaining to natural history are recorded below under the "Papers on Natural History" (q.v.). Its Proceedings were for a short time (1817–19) published in Biglow's "American Monthly Magazine and Critical Review" (see below).

With the advent of the Lyceum of Natural History of New York (1817), q.v., the natural history labors of the Society practically ceased, as most of the members of the older organization became associated with the newer and younger one, founded by S. L. Mitchill.

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v. 1, Aug. 1, 1815, p. I–[XVIII], 4, [19]–570
v. 2, 1825, 84 p.

1818 ———. The charter, laws, and regulations . . . with a list of officers and members. N. Y. C. S. Van Winkle, printer, 1818. 16 p.
Repr. from the Preface to the Trans. v. 1.

Proceedings & Transactions (T)

The Proceedings in abstract were pub. in Amer. Monthly Mag. & Critical Rev. ed. by Biglow (1817), q.v. as follows:
v. 1, p. 125, 194–95, 288, 376, 451–52. June–Sept. 1817.
v. 2, p. 57–8, 122–23, Nov.–Dec. 1817.
v. 4. p. 292–93, Feb. 1819.

Papers on Natural History

TRANSACTIONS (T)

1814 MITCHILL, S. L. A detailed narrative of the earthquakes which occurred on the 16th day of December, 1811, and agitated the parts of

North America that lie between the Atlantic Ocean and Louisiana; and also a particular account of the other quakings of the earth occasionally felt from that time to the 23d and 30th of January, and the 7th and 16th of February, 1812, and subsequently to the 18th of December, 1813, and which shook the country from Detroit and the Lakes to New Orleans and the Gulf of Mexico; compiled chiefly at Washington, D. C. Rd April 14 & May 12. T. v. 1, no. 3, p. [281]–331.

Includes:

1) The leading facts relative to the earthquakes which desolated Venzuela, in South America, in the months of March and April, 1812. p. 308–15.

2) Description of the volcano and earthquake, which happened in the island of St. Vincent's on the 30th day of April, 1812. p. 315–23.

3) History of the earthquakes and volcanoes in the Azores particularly in the Islands of St. George, Pico, and St. Michael, and in the adjoining ocean during the years 1808 and 1811. p. 324–31.

Clinton, De Witt. An introductory discourse . . . [with notes and illustrations]. T. v. 1, p. [19]–184. Delivered May 4.

Rev. in North Amer. Rev. v. 1, p. 390–402. 1815. Two other ed. appeared, as separates:

1) Van Winkle & Wiley ed.: An introductory discourse delivered before the Literary and Philosophical Society of New York on the fourth of May, 1814. New York, Printed by Van Winkle and Wiley, 1815. 160 + [1] p. 4°.

2) Longworth ed.: Same title: New-York, Published by David Longworth, 1815. 148 p. 8°.

Treats of the achievement of the Scientific Societies up to that time, and of what had been accomplished in natural history. Sections relating to this field are on p. 49–72 & p. 81–173. (Notes C–MM) of T. v. 1.

Also in Van Winkle ed., p. 33–57, & p. 64–149. (Notes C–MM).

Also in Longworth ed., p. 21–36, & p. 41–138. (Notes C–MM).

Mitchill, S. L. The fishes of New York, described and arranged . . . T. v. 1, no. 5; p. [355]–492, 6 pl. [60 fig.]. Rd Dec. 8.

Assisted by Samuel Akerly, and S. G. Mott.

Supplement pub. in Biglow, (see below, 1819). See also paper in following entry, by Clinton, 1815.

1815 Clinton, De Witt. Some remarks on the fishes of the western waters of the state of New York . . . . in a letter to S. L. Mitchill . . . T. v. 1, no. 6, p. [493]–501. Rd Feb. 9.

Literary and Philosophical Society of New York. Circular letter of . . . on the subject of a statistical account of the state of New York. T. v. 1, p. [559]–65. Rd Feb. 15.

Repr. as separate: N. Y. T. & W. Mercein, 1815. [20] p.

MacBride, James. Account of the Lycoperdon tuber of Clayton, a subterranean fungus, found in the southern states. Biglow, v. 1, no. 3, p. 194–95. Rd May 8.

Mitchill, S. L. A memoir on the fossil remains of organized beings, more especially of animals around New York. Biglow, v. 1, no. 2, p. 125. Rd May 8.

Mease, James. Facts respecting the rock fish or streaked basse of the United States. T. v. 1, no. 7, p. [502]–4. Rd July 13.

McNeven, W. J. Chemical examination of the mineral water of Schooley's Mountain. T. v. 1, no. 9, p. [539]–57. Rd July 13.

1817 Rafinesque, C. S. Addition to the observations on the sturgeons of North America. Biglow, v. 1, no. 4, p. 288. Rd July 10.

Cont. in v. 2, p. 57. Nov. 1817. (Rd Oct. 9).

Garin, M. . . . Numerous facts of a geological nature relative to the western part of the state of New York. Biglow, v. 1, no. 4, p. 288. Rd July 10.

Clinton, De Witt. On certain phenomena of the Great Lakes of America. T. v. 2, pt. 1, art. 1, p. [25]–33. Rd Nov. 13.

————. A memoir on the antiquities of the western part of the state of New York . . . T. v. 2, pt. 1, art. 3, p. [71]–84. Rd Nov. 13.

Also in Biglow, v. 4, p. 43–8. Nov. 1818.

1819 Mitchill, S. L. Supplement to Mitchill's "Ichthyology of New York." Biglow, v. 4, no. 4, p. 241–48. Feb. 1819.

See his paper rd Dec. 8, 1814 (above).

Dewey, Chester. Description of two ranges of mountains in the state of Massachusetts . . . in a letter to . . . S. L. Mitchill. Biglow, v. 4, no. 4, p. 284–85. Feb. 1819.

1824 Van Rensselaer, Jeremiah. Notice of the fossil Crustacea of New Jersey. Rd in March.

Also rd before N. Y. Lyc. Nat. Hist. (1817), Nov. 15, 1824. In its Annals. v. 1, pt. 2, p. 195–98, 249, 1 pl. 1824.

Mitchill, S. L. Observations and facts concerning the Siren Lacertina of Georgia and Carolina . . . Rd May 13.

In N. Y. Med. & Phys. Jour. (1822), v. 3, no. 2, p. 184–98, 1 pl. June, 1824.

————. The hedge-hog ray, a species of fish taken occasionally near New York, in the Atlantic Ocean, and, now, as is believed for the first time described. Rd June 10.

In Amer. J. Sc. (1818), v. 9, no. 2, p. 290–93. June, 1825.

Van Rensselaer, Jeremiah. Notice of a recent discovery of the fossil remains of the Mastodon. Rd June 10.

In Amer. J. Sc. (1818), v. 11, no. 2, p. 246–50. Oct. 1826.

COLUMBIAN INSTITUTE FOR THE PROMOTION OF ARTS AND SCIENCES, WASHINGTON, D. C. (1816)

History

The Columbian Institute for the Promotion of Arts and Sciences was formed on June 15, 1816, at Washington, D. C.

> "A few of the citizens impressed with the importance of collecting and distributing the various vegetable productions of this and other countries, have determined to form themselves into a Society under the name of the 'Metropolitan Society,' and to connect with it a cabinet of the minerals of the United States and other parts of the world . . ."
>
> "They have it in contemplation to apply to Congress for the appropriation of about 200 acres of ground, called the 'Mall,' which was designed in the original plan of the city for a public garden. In this place it is proposed to cultivate the plants and seeds wheih may be presented to them; and as they multiply, to distribute them throughout this extensive continent . . ." Prospectus.

On August 8, 1816, at the presentation and ratification of a draft of the Constitution, the name was changed from the Metropolitan Society to the Columbian Institute for the Promotion of Arts and Sciences. Its charter of incorporation was received from Congress, dated April 20, 1818, to expire twenty years hence.

Its objects which related to natural history as contained in the Constitution were:

> a) " . . . To collect, cultivate, and distribute the various vegetable productions of this and other countries, whether medicinal, esculent or for the promotion of arts and manufactures. . . .
>
> b) . . . To collect and examine the various mineral productions and natural curiosities of the United States, and give publicity to every discovery, which they may have been enabled to make . . ."

On May 20, 1820, the use of five acres of land was authorized by Congress, for a botanical garden. This grant was extended by legislation passed May 26, 1824. That part of the eastern section of the Mall, near the Capitol, became the site of the Garden of the Institute, and subsequently (in 1852), also became the site of the National Botanical Garden (1852), q.v.

The foundation of the Institute was due primarily to the efforts of Dr James and Edward Cutbush, and Thomas Law. Edward

Cutbush became the first president, and was followed by Josiah Meigs, J. Q. Adams, J. C. Calhoun, Mahlon Dickerson, during the next twenty years of its existence.

Its curators from 1816–1820 were Elias B. Caldwell, John Law, R. C. Weightman, Robert Brent, William Thornton, Samuel H. Smith, Joseph Anderson, and Andrew Hunter.

Meetings were generally held twice a year, and annual Addresses were delivered regularly for several years. According to RATHBUN (see Bibliography below), some 85 papers were read before the Institute, of which four were on botany.

On October 1, 1827, Dr Alex. MacWilliams and James M. Staughton prepared "A circular of instructions for collecting and preserving animal, vegetable, and mineral specimens."

> "Whereas the charter of the Columbian Institution for the Promotion of Arts & Sciences, expired on the 20th of May, 1838, and whereas a new Society has been formed by voluntary association, by the name of the National Association (see Nat. Inst. Prom. Sc. 1840)), and whereas the said National Institution has, by a resolution passed on the 12th day of July, 1841, invited the members of the . . . to become members of the said Institute . . ." Asbury DICKINS, Secretary of the Columbian Inst. Prom. Arts & Sc. Quoted from Nat. Inst. Prom. Sc. (1840). Bull. no. 1, p. 113, 1840. The activities of the Columbian thus passed over to the National Institute (1840), q.v.

Only the salient facts in the history of the Institute have been presented as they are treated at length and thoroughly in RATHBUN's study, noted in the Bibliography below.

Addresses

1817 CUTBUSH, Edward. An address delivered before the Columbian Institute for the Promotion of Arts and Sciences at the city of Washington, on the 11th day of January, 1817. Wash. Printed by Gales & Seaton, 1817. 29 p.

An account of the purposes and organization of the Institute.

1828 SOUTHARD, Samuel L[ewis]. Anniversary address, delivered before the Columbian Institute at Washington on the thirty-first of December, [1827] . . . Wash. 1828. 29 p.

For the four other addresses delivered before the Institute, not relating to science, see RATHBUN.

Bibliography

1892 GOODE, G. B. [The Columbian Institute . . .] (In U. S. Nat. Mus. Ann. Rept. 1891. Wash. 1892. p. 273–80).

Repr. in U. S. Nat. Mus. Rept., 1897. pt. 2 (Memorial G. B. Goode)—p. 87–92, in his Genesis of the U. S. Nat. Mus. Historical matter concerning that Institution is on p. 283–86 of this 1897 Report.

1917 RATHBUN, Richard. The Columbian Institute for the Promotion of Arts and Sciences: a Washington Society of 1816–1838, which established a Museum and Botanic Garden under government patronage. Wash. Gov't print. off., 1917. 3 + 87 p. (In U. S. Nat. Mus. Bull. no. 101).

Appx. p. 75–7 contains brief history of the Washington Bot. Soc. (1817), q.v.

AMERICAN MONTHLY MAGAZINE AND CRITICAL REVIEW, NEW YORK CITY (1817)

History

The "American Monthly Magazine and Critical Review" made its first appearance in May, 1817, as a monthly journal. It aimed to present original communications in all the departments of knowledge. Its first editor, who was also its publisher, was H. [ ] Biglow. Six numbers constituted a volume, and only four volumes were published.

It contained a section called "The Museum of Natural Sciences" which was edited by C. S. RAFINESQUE. It also was the organ for the publication of the Proceedings of the following Societies of New York City: The Literary and Philosophical Society of New York (1814), q.v.; the New York Historical Society (1804), q.v.; and the Lyceum of Natural History of New York (1817), q.v.

With v. 2, O. L. Holley became associate editor, and v. 4 was edited by Holley alone. Rafinesque also contributed a number of reviews of contemporary scientific works.

Below are given the papers on natural history which appeared in the Magazine during its short-lived career.

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1817 (The) AMERICAN MONTHLY MAGAZINE AND CRITICAL REVIEW . . . New-York, Pub. for H. Biglow, editor and proprietor, by Kirk & Mercein . . . , 1817–19. 4 v.

Papers on Natural History

1817

vol. 1, no. 4, August

AKERLY, Samuel. An account of the wheat insect, or the Tipula vaginalis tritici, commonly called the Hessian fly. p. 275–79, illus.

vol. 1, no. 5, September

RAFINESQUE, C. S. Description of the Tubipora striatulae, a new species of fossil from the state of New York. p. 359–60.

Rd before N. Y. Lyc. Nat. Hist. (1817), April 9, 1817.

————. Specimens of several new American species of the genus Aphis. p. 360–61.

See also Ent. Soc. Wash. Proc. v. 12, p. 27–30. 1910.

Reference incorrectly cited in this article.

————. New species of Mamifers, noticed in the notes to the (Tableau des Mammiferes) ''Methodical picture of the Mammifers,'' by D. Desmarets . . . p. 361–63.

AKERLY, Samuel. Remarks on the cultivation of the locust tree (Robinia pseudo-acacia). p. 363–65.

vol. 1, no. 6, October

RAFINESQUE, C. S. Dissertation on water snakes, sea snakes and sea serpents. p. 431–35.

*LE RAYE, Charles, and R[AFINESQUE], C. S. Extracts from the Journal of Mr Charles Le Raye relating to some new quadrupeds; with notes by C. S. Rafinesque. p. 435–37.

Notes relate to the Missouri region.

RAFINESQUE, C. S. Neogenytum siculum; or, Descriptions of four new genera of Dicotyle Sicilian plants. p. 437–39.

————. Description of seven new species of Sicilian plants. p. 439–40.

————. Florula of the White Mountain of New Hampshire. p. 440–42.

MITCHILL, S. L., and others. Further evidence to prove the existence of the Kraken in the ocean, and tending to show that this huge creature is a species of Sepia or Squid . . . being three several communications of facts made . . . by William Lee, Capt. Riley and Capt. Neville, in Sept. 1817 . . . p. 443–44.

vol. 2, no. 1, November

RAFINESQUE, C. S. Synopsis of four new genera and ten new species of Crustacea, found in the United States. p. 40–2.

————. First decade of undescribed American plants; or, Synopsis of new species from the United States. p. 43–4.

————. Descriptions of seven new genera of North American quadrupeds. p. 44–6.

Suffern, Edward. . . . Discovery, for the first time, on the east side of the mountains, of some fossil remains of the Mammoth. p. 46–7.
Rd before N. Y. Lyc. Nat. Hist. (1817), Sept. 15, 1817.

vol. 2, no. 2, December

Rafinesque, C. S. Survey of the progress and actual state of natural sciences in the United States of America, from the beginning of this century to the present time. p. 81–9.

————. Description of the Ioxylon pomerifum, a new genus of North American tree. p. 118–19.
Rd before N. Y. Lyc. Nat. Hist. (1817), Sept. 22, 1817.

————. Second decade of undescribed American plants. p. 119–20.

————. First decade of new North American fishes. p. 120–21.

1818

vol. 2, no. 3, January

————. Introduction to the ichthyology of the United States. p. 202–3.

————. Descriptions of two new genera of North American fishes, Opsanus and Notropis. p. 203–4.

————. Second decade of new North American fishes. p. 204–6.

————. Third decade of new species of North American plants. p. 206–7.

vol. 2, no. 4, February

Mitchill, S. L. The fishes of New York described and arranged; in a supplement to the "Memoir" on the same subject, printed in the New York Literary and Philosophical Society Transactions, v. 1, p. 355–492 . . . p. 241–48, illus.
Cont. in no. 5 (below, q.v.). Rd before Lit. & Philos. Soc. N. Y. (1814), Dec. 8, 1814. In its Trans. v. 1, p. 355–492, illus. 1815. Both supplements contain 266 species.

Clements, James. Description of the Oestrus ovis, or the botts of sheep. p. 249–50.
Rd before N. Y. Lyc. Nat. Hist. (1817), Nov. 10, 1817.

Akerly, Samuel. Economical history of the fishes, sold in the markets of the city of New York. p. 293–96.
Cont. in v. 2, no. 5 (below, q.v.).

vol. 2, no. 5, March

Mitchill, S. L. The fishes of New York described and arranged . . . (cont.). p. 321–28.
Cont. from no. 4 (above, q.v.).

ATWATER, Caleb. Observations on the remains of civilization and population, extant on the vast plains situated south of the North American lakes . . . aboriginal antiquities of the west . . . p. 332–35.

AKERLY, Samuel. Economical history of the fishes, sold in the markets of the city of New York. p. 370–72.

Cont. from no. 4 (above, q.v.). Cont. in no. 6 (below).

vol. 2, no. 6, April

———. Economical history of the fishes, etc. (cont.). p. 473–75.

Cont. from no. 5 (above, q.v.), preceding entry.

vol. 3, no. 1, May

RAFINESQUE, C. S. Second memoir on the genus Aphis, containing the description of 24 new American species. p. 15–8.

See also Ent. Soc. Wash. Proc. v. 12, p. 27–30. 1910.

TOWNSEND, P. S. Memoir on the crystallization of snow. p. 18–21, illus.

Rd before N. Y. Lyc. Nat. Hist. (1817), April 9, 1817.

STRANGER, John. Supplement to Dr Mitchill's ''Observations on the geology of North America'' just published by Messrs Kirk & Mercein, in the description of a fossil elephant discovered in Wythe County, southwest of the river Ihanhawa, in Virginia . . . March 10, 1818. p. 60.

vol. 3, no. 2, June

GARDEN, Alex[ander]. [On the fascinating power attributed to snakes.] p. 81–4.

LONG, S. H. A description of the Hot Springs, near the river Washitaw, and of the physical geography of the adjacent country . . . St. Louis, Feb. 23, 1818. p. 85–7.

Rd before N. Y. Lyc. Nat. Hist. (1817), April 20, 1818.

vol. 3, no. 4, August

CLARK, Abr[aham], and MITCHILL, S. L. Perennial flax described and recommended . . . p. 290.

Rd before N. Y. Lyc. Nat. Hist. (1817), July 13, 1818.

MITCHILL, S. L. On the goats of Caramania. p. 290–91.

Rd before N. Y. Lyc. Nat. Hist. (1817), July 13, 1818.

———. An account of the impression of fish in the rock of Oneida County, N. Y. p. 291.

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EDDY, J. H. . . . Circular concerning the natural history, agriculture, archaeology, etc., of the country lying west of the village of Utica, N. Y. p. 292–94.

vol. 3, no. 5, September

Rafinesque, C. S. Discoveries in natural history, made during a journey through the western region of the United States . . . July 20, 1818. p. 354–56.

Mitchill, S. L. Facts concerning the engrafting of the spurs of cocks upon their combs. p. 356–57.
Rd before N. Y. Lyc. Nat. Hist. (1817), June 15, 1818.

Allen, J. M. On the mongrel races of animals. p. 357.
Rd before N. Y. Lyc. Nat. Hist. (1817), June 15, 1818.

Mitchill, S. L. Description of a Phoca vitulina, or common seal of the Long Island and New England coast . . . p. 357–58.
Rd before N. Y. Lyc. Nat. Hist. (1817), June 15, 1818.

vol. 3, no. 6, October

Rafinesque, C. S. Further discoveries in natural history, made during a journey through the western region of the United States. p. 445–47.

vol. 4, no. 1, November

————. Farther account of discoveries in natural history in the western states . . . p. 39–42.

Clinton, De Witt. A memoir on the antiquities of the western parts of the state of New York. p. 43–8.
Rd before Lit. & Philos. Soc. N. Y. (1814), Nov. 13, 1817. In its Trans. v. 2, p. 71–84. 1824.

vol. 4, no. 2, December

Rafinesque, C. S. General account of the discoveries made in the zoology of the western states, in 1818. p. 106–7.

Partridge, Alden. Descriptive and practical observations upon the mountains of New England, more especially those of Vermont and New Hampshire . . . Oct. 23, 1818. p. 124–29.

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Mitchill, S. L. Account of recent scientific transactions at the New York Institution. p. 133–37.

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vol. 4, no. 3, January

Rafinesque, C. S. Result of botanical discoveries made in the western states. p. 207–8.

vol. 4, no. 4, February

Dewey, Chester. Description of two ranges of mountains in the state of Massachusetts. p. 284–85.

vol. 4, no. 5, March

Rafinesque, C. S. 1) On the introduction and cultivation of the tea plant . . . ; 2) On several species of tea, their discriminating characters, etc. . . . p. 382–84.

Rd before N. Y. Lyc. Nat. Hist. (1817), Feb. 8, 1819.

Anon. On the existence of a lake whose waters once washed the rocks at the Little Falls of the Mohawk, to the height of at least one hundred feet above the present level of the stream. p. 385–87.

vol. 4, no. 6, April

Rafinesque, C. S. On the date-tree or palm. p. 465–67.

LYCEUM OF NATURAL HISTORY OF NEW YORK (1817)

History

"It was in the hall of the College of Physicians and Surgeons, in Barclay Street, on the twenty-ninth of January, 1817, that a few kindred spirits gathered to consider the establishment of an institution devoted to the study of natural history. Dr Mitchill occupied the chair. Seven more preliminary meetings were held at the college within a month, and finally, all the arrangements being completed, and a constitution adopted and engrossed, the Lyceum of Natural History held its first formal meeting in the evening of the twenty-fourth of February, at Harmony Hall, a public house on the southeast corner of Duane and William Streets. The first twenty-one members signed the constitution at this time, and the first officers were elected.

"Dr Mitchill was the president; his nephew, Dr Caspar Wistar Eddy, was the first vice-president; the second vice-president was Rev. Frederick Schaeffer, the young pastor of Christ Lutheran Church; Dr. John Wakefield Francis, one of Dr Mitchill's younger colleagues on the faculty of the Medical College, was corresponding secretary; the recording secretary was John Broadhead Beck, then a student of medicine; and the treasurer was Dr Benjamin P. Kissam, who had received his medical degree the preceding year. It is noteworthy that of the twenty-one signers of the constitution at this meeting, a majority were students, graduates or members of the Faculty of the College of Physicians and Surgeons, and as far as known none but the President was more than twenty-seven years old. . . .

"For nearly fifteen years, from April, 1817, to September, 1831, the Lyceum enjoyed the hospitality of the Common Council of the City, sharing with other societies, rent free, the use of the 'New York Institution' popularly known as the 'Old Almshouse' in City Hall Park. Here the Lyceum had rooms for its meetings, and for the preservation and display of its collections; these grew apace, not only by gifts, but by the incorporation of material collected specifically for the 'Cabinet' by Lyceum members. Dr Mitchill wrote:

> The members called it the Lyceum, in remembrance of the school founded by that sublime genius, Aristotle, at Athens. Disciples of the 'mighty Stagirite,' they determined, after his example, to be Peripatetics, and to explore and expound the arcana of nature as they walked.

During the first year of the Society, 1817, we have mention of collecting trips by Mitchill, Townsend, Torrey, Rafinesque, and Knevels. Within ten years the cabinet of the Lyceum comprised one of the most extensive collections of objects (natural) in America, excelling all others in its series of minerals, fossils, reptiles, fishes and echinoderms. It is evident that one of the chief purposes of the Society from its establishment was the formation of such a museum, and its success was phenomenal.

"Soon after the establishment of the Lyceum, the formation of a Library was commenced, but this consisted largely of books loaned by members and subsequently withdrawn, so that after an interval of seven years the number of books actually owned by the Society was less than two hundred. An old organization known as the United States Military and Philosophical Society, however, having become extinct, with about $2500 in its treasury, the surviving members transferred this sum to the Lyceum for use as a Library fund. This happened in 1825, and the library then began to grow rapidly and steadily. . . .

"The first publication of the Lyceum was undoubtedly the printed Constitution, laid on the table on the meeting of May 19, 1817. Technical scientific publication commenced with the issue of the first number of the ANNALS, in 1823. . . .

"In 1829, the members of the Lyceum learned that they might at any time be required to vacate the four rooms in the New York Institution occupied by them for their meetings, library and collections, and they began at once to look about for new quarters. A building-fund was inaugurated, but the project had not even reached the stage of selection of a building-site when removal became imperative. The library and collections were temporarily deposited in other rooms in the same building during the winter of 1830–31; the following summer they were removed to new rooms in the New York Dispensary, on the corner of White and Center Streets, and in these rooms the Lyceum met for the first time September 4, 1831.

"The Dispensary remained the home of the Lyceum for nearly five years. Meanwhile, the building project was being pushed with more energy than caution. In January, 1835, two lots were purchased at 561–565 Broadway, south of Prince Street; construction was commenced in May. A year later, May 9, 1836, the Society held its first meeting in its new building. There was now ample room for the proper accommodation of the collections and library, and there were stores on the street level and rooms on the upper floors to contribute an income. About fifteen thousand dollars in cash had been invested in the land and building; but this was in a period of financial inflation, and the three mortgages on the property totalled thirty-five thousand dollars. During the years of depression that followed, the financial troubles of the Lyceum went from bad to worse, until finally, in February, 1844, the property was sold at auction, under legal proceedings, for thirty-seven thousand dollars, barely enought to cover the amount of the mortgages and the unpaid interest thereon. 'And the Lyceum found itself out of debt and out of a home, with a valuable library and large collections, and no place to put them.' For a year the collections were stored and the Library deposited in the buildings of New York University, while the meetings were held in the home of the President, Major Joseph Delafield, at 104 Franklin Street.

"After a period of much uncertainty, arrangements were finally completed for rooms with the University Medical College, in Stuyvesant Institute, 659 Broadway, opposite Bond Street. Here the library was satisfactorily accommodated, and a considerable part of the collections could be displayed, and here the Lyceum met for the first time April 7, 1845. In 1851, the Medical College sold the building and erected a new one on Fourteenth Street, on the site since long occupied by Tammany Hall. The Lyceum accepted the offer of a meeting-room in the new building, but the collections, with minor exceptions had to be boxed and stored in the cellar, while the Library was deposited temporarily with the Mercantile Library Association.

"For fifteen years the Lyceum held its meetings in the Fourteenth Street building, until, on the night of May 21, 1866, this was totally destroyed by fire. The Society which had lost its building in 1844 was now without collections; after half a century of enthusiastic work and sacrifice, it was without material possessions other than its library. . . ." Reprinted from BARNHART, John Hendley. p. 463–69 (see Bibliography, below, 1917).

Below are given the dates of publication of the Proceedings and Annals of the Lyceum, followed by a chronological list, by date of reading, of the Papers on Natural History to be found in the Annals or elsewhere, notably the American Monthly Magazine & Critical Review (1817), and the American Journal of Science (1818), in both of which the proceedings of the Society during its early days, were published. Below are also given a list of the officers and a Bibliography of the Lyceum.

In 1876 the Lyceum became the present well known New York Academy of Sciences.

Homes of the Museum of Natural History

From FAIRCHILD, p. 51. (See Bibliography below)

1817	Feb.–Apr. Organized in the College of Physicians & Surgeons, Barclay St.
1817–1831	Apr. 21, 1817–Sept. 4, 1831. At the New York Institution.
1831–1836	Sept. 4, 1831–May 9, 1836. At the New York Dispensary.
1836–1844	May 9, 1836–Apr. 9, 1844. The Lyceum building.
1844	April 9, 1844–April 7, 1845. President Delafield's Library.
1845–1851	April 7, 1845–Mar. 17, 1851. Stuyvesant Institute.
1851	Mar. 24, 1851–June 30, 1851. Delafield's house.
1851	Sept. 8–Oct. 27, 1851. W. C. Redfield's house.
1851–1866	Nov. 3, 1851–May, 1866. University Medical College, 14th Street.

Officers of the Lyceum
1817–1865

PRESIDENT:

1817–23	S. L. Mitchill.
1824–26	John Torrey.

1827–37 Joseph Delafield
1838 John Torrey.
1839–65 Joseph Delafield.

VICE-PRESIDENTS (First):

1817–18, C. W. Eddy; 1819–21, F. C. Schaeffer; 1822, George Gibbs; 1823, 1834–37, 1839, John Torrey; 1824, D. H. Barnes; 1825–33, Abraham Halsey; 1838, J. E. De Kay; 1840–46, J. A. Smith; 1847–51, John Le Conte; 1852–53, W. C. Redfield; 1854–64, William Cooper.

CORRES. SEC.:

1817, Samuel Akerly; 1818–19, Nathaniel Paulding; 1820, Peter S. Townsend; 1821–23, J. E. De Kay; 1824–36, Jeremiah Van Rensselaer; 1837–38, Samuel Thomas Carey; 1839–60, J. H. Redfield; 1861–75, Robert Dinwiddie.

RECORD. SEC.:

1817, J. B. Beck; 1818–20, William Cooper; 1821–23, Abraham Halsey; 1824, F. G. King; 1825–26, D .H. Barnes; 1827, 1829, 1831, J. J. Graves; 1828, 1832, Leonard D. Gale; 1830, Alfred Wagstaff; 1833, J. E. De Kay; 1834–36, S. T. Carey; 1837–38, J. H. Redfield; 1839–75, Robert H. Brownne.

LIBRARIANS:

1824, F. S. Cozzens; 1825, 1828–32, J. E. Dekay; 1826–27, J. J. Graves; 1833, J. C. Jay; 1834–35, George W. Boyd; 1836, Asa Gray; 1837–38, R. H. Brownne; 1839–44, Issachar Cozzens; 1845–48, R. H. Brownne; 1849–51, Oran W. Morris; 1852–53, Robert Dinwiddie; 1854–67, O. W. Morris.

TREASURERS:

1817–21, Benjamin P. Kissam; 1822–23, Lucius Bull; 1824–35, William Cooper; 1836–43, J. C. Jay; 1844–46, J. P. Giraud, Jr.; 1847–63, C. M. Wheatley; 1864–71, Temple Prime.

Bibliography

1817 LYCEUM OF NATURAL HISTORY OF NEW YORK. The Constitution.... N. Y. Printed for the Society by George Forman, 1817. 14 p.

Copy examined is in Library of Amer. Mus. Nat. Hist.

1820 TOWNSEND, P[eter] S. An anniversary discourse delivered before the Lyceum of Natural History of New York, the 28th of February, 1820. N. Y. Wiley & co., 1820. 42 p.

1823 LYCEUM OF NATURAL HISTORY OF NEW YORK. Charter constitution, and by-laws. N. Y. 1823. 22 p.

Repr. N. Y. 1826. 17 p.

1824 ————. Annals. N. Y. Printed for the Lyceum, 1824–76. 11 v.

For dates of publication of the separate volumes, see below: ANNALS: Dates of Publication.

1826 DE KAY, James Ellsworth. Anniversary address on the progress of the natural sciences in the United States, delivered before the Lyceum of Natural History of New York, February, 1826. N. Y. G. & C. Carvill, 1826. 78 p.

See ANNOTATED BIBLIOG.: De Kay.

MITCHILL, Samuel Latham. Catalogue of the organic remains which with other geological and some mineral articles were presented to the New York Lyceum of Natural History, in August, 1826, by their associate, S. L. Mitchill. N. Y. Printed by J. Seymour, 1826. 40 p.

————. A discourse on the character and services of Thomas Jefferson, more especially as a promoter of natural and physical science, pronounced by request, before the New York Lyceum of Natural History, on the 11th day of October, 1826. N. Y. G. & C. Carvill, 1826. 67 p.

1827 LYCEUM OF NATURAL HISTORY OF NEW YORK. Remarks explanatory of the objects of the. . . . N. Y. 1827.

1828 MITCHILL, Samuel Latham. Summary of the progress of the natural sciences within our United States for a few years past. . . . New York, 1828.

1829 LYCEUM OF NATURAL HISTORY OF NEW YORK. Memorial to the State of New York (Legislature) . . . requesting an efficient examination of the mineral formation of the state, particularly for bituminous coal . . . Feb. 2, 1829. . . . (In Amer. J. Sc. v. 16, no. 2, p. 358–60. July, 1829)

Memorial signed by Joseph DELAFIELD, President of the Lyceum.

————. Report of a Committee to the New York Lyceum of Natural History on the examination of Audubon's "Birds of America" . . . (In Amer. J. Sc. v. 16, no. 2, p. 353–54. July, 1829)

1830 ————. Index to the library of the. . . . N. Y. J. Seymour, 1830. 72 p.

Pts printed previously in Annals. v. 1, pt. 1, appx., 12 p. 1824; v. 1, pt. 2, Dec. 1825, p. 392–402; & v. 2, p. 453–66. Dec. 1827.

1835 ————. Charter, constitution, and by-laws. . . . N. Y. 1835. 24 p.

p. 3–8. Definition of the divisions of natural history. Another ed. 1837.

1839 REDFIELD, William C., and JAY, John Clarkson. Report on the shells and minerals presented by Dr Brinckerhoff to the New York Lyceum of Natural History. (In Amer. J. Sc. v. 38, no. 1, p. 198–201. Jan. 1840.)

DELAFIELD, Joseph. Report upon the minerals, geological specimens and fossils, from the Island of St. Lorenzo, presented to the New York Lyceum of Natural History. (In Amer. J. Sc. v. 38, no. 1, p. 201–2. Jan. 1840)

1846 SMITH, John Augustine. The mutations of the earth; or, An outline of the more remarkable physical changes, of which, in the progress of time, this earth has been the subject, and the theatre; including an examination into the scientific errors of the author of the "Vestiges of creation" being the anniversary discourse for 1846, delivered in the chapel of the University, before the Lyceum of Natural History of New York. . . . N. Y. Bartlett & Welford, 1846. 64 p.

1848 LYCEUM OF NATURAL HISTORY OF NEW YORK. Report upon an individual of the bushman tribe of Hottentots brought from the Cape of Good Hope, by Mr Chase, U. S. Consul at the Cape; by the Committee of the Lyceum of Natural History: A. B. Stout, Wolcott Gibbs, J. A. Smith, J. L. Le Conte, T. C. Telkampf. N. Y. Langley, 1848. 8 p. port. pl.

1851 FRANCIS, John Wakefield. A discourse delivered upon the opening of the New Hall of the New York Lyceum of Natural History. N. Y. H. Ludwig, 1851. 93 p.

1864 ————. Charter, constitution, and by-laws . . . with a list of members. . . . N. Y. 1864. 35 p.

Frequently repr.

1870 ————. Proceedings: ser. 1–2; 1870–74. N. Y. 1870–74.

ser. 1 Apr. 4, 1870–Dec. 4, 1871.
2 Jan. 6, 1873–June 1, 1874.

1877 NEW YORK ACADEMY OF SCIENCES. Annals of the . . . late Lyceum of Natural History of New York. N. Y. 1877–date. v. 1–date.

1881 ————. Transactions of the . . . late Lyceum of Natural History of New York. N. Y. 1881–97. 16 v.

1887 FAIRCHILD, Herman Le Roy. A history of the New York Academy of Sciences, formerly the Lyceum of Natural History. . . . N. Y. Pub. by the author, 1887. 12 + 190 p. 7 pl. 27 port.

Rd in abstract before the Society, May 10, 1886. Only 500 copies printed.

Contents:

sect. 1) Origin, organization & incorporation, p. 1–20.
2) Original members, p. 21–7.
3) Places of meeting & the Lyceum, p. 28–51.
4) Officers, p. 52–6.
5) Biographical sketches, p. 57–96.
6) Collections, p. 97–107.
7) Library, p. 108–17.
8) Publications, p. 118–23.
9) Semi-centennial, p. 124–25.
10) Change of name & constitution, p. 126–31.
11) Membership, p. 132–62.
12) Charter, Order of Court, Constitution & by-laws, p. 163–81.

1917 BARNHART, John Hendley. The first hundred years of the New York Academy of Sciences. (In Scientific Monthly. v. 5, p. 463–75, illus. Nov. 1917)

Excellent account of the Lyceum read at its centenary. The portion relating to the period prior to 1866 is reprinted above, by permission of the author, under the History (q. v.).

Annals (A)

Dates of Publication

v. 1, pt. 1,	1824	4 + p. 1–192 + 12 p., 10 pl.	
pt. 2,	1825	4 + p.[193]–410, 19 pl.	
v. 2,	[1826]–28	480 p., 6 pl.	
v. 3,	[1828]–36	10 + [454] p. 6 pl.	
v. 4,	[1837]–48	[530] p. 18 pl.	
v. 5,	[1851]–52	20 + [568] p. 6 pl.	
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		p. 77– 119	May, 1851
		p. 121– 84	Sept. 1851
		p. 185– 216	Feb. 1852
		p. 217– 96	June, 1852
		p. 297–[568]	July, 1852
v. 6,	[1853]–58	[445] p. 9 pl.	
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		p. 103 – 246	Apr. 1860
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		p. 287 – 302	Jan. 1861
		p. 303 – 70, 367*– 70*, 371 – 82,	June, 1861
		p. 383 – 446	Dec. 1861
		p. 447 –[515]	Feb. 1862
v. 8,	[1863]–67	11 + [507] p. 16 pl.	
		p. 1– 16	May, 1863
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		p. 123– 54	May, 1865
		p. 155– 212	Nov. 1865
		p. 213– 302	Apr. 1866
		p. 303– 50	June, 1866
		p. 351– 98	Oct. 1866
		p. 399– 420	Nov. 1866
		p. 421– 68	Apr. 1867
		p. 469–[507]	May, 1867

Proceedings

1) BIGLOW

Abstracts of the Proceedings of the Lyceum were published in the AMERICAN MONTHLY MAGAZINE & CRITICAL REVIEW; ed. by Biglow. (1817.) N. Y. 1817–19. 4 v. (Often called Biglow's Mag.) References below in "Papers on Natural History" are given as "Biglow." . . .

For 1817 in v. 1, p. 126–27, 195–96, 288–90, 376–78, 452–54. June–Oct. 1817.
in v. 2, p. 56–7, 123. Nov.–Dec. 1817.
For 1818 in v. 4, p. 66. Nov. 1818.

2) AMERICAN JOURNAL OF SCIENCE (1818)

From 1819 through 1834, abstracts of the Proceedings of the Lyceum were published in the American Journal of Science (1818), ed. by Benjamin Silliman, as follows:

FOR	IN	
1819	v. 2, no. 2, p. 366–72.	Nov. 1820.
1820–22	v. 6, no. 2, p. 361–66.	May, 1823.
1823		
Jan. 6–May 19	v. 7, no. 1, p. 171–74.	Nov. 1823.
May–June	v. 8, no. 1, p. 192–93.	May, 1824.
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Mar. 1–Aug. 23	v. 10, no. 1, p.:198–201.	Nov. 1825.
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Jan.–Apr.	v. 13, no. 2, p. 378–81.	Jan. 1828.
Apr.–Aug.	v. 14, no. 1, p. 190–94.	Apr. 1828.
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May–June	no. 2, p. 357–60.	Jan. 1829.
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Jan.–June	no. 2, p. 353–60.	July, 1829.
June–Dec.	v. 18, no. 1, p. 193–95.	Apr. 1830.
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Mar.–May	v. 19, no. 1, p. 159–60.	Oct. 1830.
June–Nov.	no. 2, p. 353–55.	Jan. 1831.
1831–34		
To July, 1834	v. 27, no. 1, p. 148–63.	Oct. 1834.
1834		
July 14–Dec. 28	v. 28, no. 1, p. 189–92.	Apr. 1835.

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1817 Townsend, P. S. A memoir on the stellar crystallization of snow, grounded on some very beautiful phenomena of this kind. . . . Rd April 9.

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Rafinesque, C. S. On a fossil and undescribed species of Tubifore, called T. striatula, near Glens Falls. Rd April 9.

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————. Classification and nomenclature of natural beings. Rd April 16.

In Biglow, v. 1, no. 2, p. 126. Je. 1817.

Schaeffer, F. C. On the peat of Dutchess County. . . . Rd May 5.

In Amer. J. Sc. (1818), v. 1, no. 2, p. 139–40. Nov. 1818.

Eddy, C. W. Lecture on botany. . . . Rd May 5.

In Biglow, v. 1, no. 2, p. 127. Je. 1817.

SCHAEFFER, F. C., and TOWNSEND, P. S. . . . Specimens of petrifactions, from Corlaer's Hook. . . . Rd May 5.

In Bigelow, v. 1, no. 2, p. 126. Je. 1817.

TOWNSEND, P. S. Translation of Hauy's "Memoir on the tourmalines of the United States." Rd May 12.

In Biglow, v. 1, no. 2, p. 127. Je. 1817.

MAC BRIDE, James. That the Gentiana saponica of Linnaeus and the Gentiana Catesbaei of Walter are different species. Rd May 12.

In Biglow, v. 1, no. 2, p. 127. Je. 1817.

PIERCE, James. Narrative of his excursion to the Catskill Mountains, giving the natural history and topography of that district of the country. Rd May 26.

In Biglow, v. 1, no. 3, p. 195. July, 1817.

MITCHILL, S. L., and TOWNSEND, P. S. Account of the exploration of a tract between the Highlands and the Catskill Mountains. Rd June 2.

In Biglow, v. 1, no. 3, p. 195–96. July, 1817.

MITCHILL, S. L. On some species of fresh water cod from Maine. Rd June 9.

In Biglow, v. 1, no. 3, p. 196. July, 1817.

————. Collection of fossils in limestone from Jefferson County, N. Y. Rd June 23.

In Biglow, v. 1, no. 4, p. 288. Aug. 1817.

————. On the Squalus pristis or sawfish. Rd June 30.

In Biglow, v. 1, no. 4, p. 289. Aug. 1817.

————. On the Hessian fly. Rd June 30.

In Biglow, v. 1, no. 4, p. 289. Aug. 1817.

EDDY, C. W. On the minerals presented to the Lyceum by Mr Eastburn. Rd July 7.

In Biglow, v. 1, no. 4, p. 289. Aug. 1817.

AKERLY, Benjamin. Species of fish from the Wallkill Creek. . . . Rd July 7.

In Biglow, v. 1, no. 4, p. 289. Aug. 1817.

DE WITT, Simeon. Fossils from the Poplar-Ridge road, about four miles east of Cayuga Lake. . . . Rd July 7.

In Biglow, v. 1, no. 4, p. 289. Aug. 1817.

MITCHILL, S. L. Detailed report on the ichthyology of the Wallkill. . . . Rd July 14.

In Biglow, v. 1, no. 4, p. 289–90. Aug. 1817.

TOWNSEND, P. S. . . . Report on the geology, botany, etc. of the region between the Catskill Mountains and the Highlands. . . . Rd July 14.

In Biglow, v. 1, no. 4, p. 290. Aug. 1817.

MITCHILL, S. L. Sturgeon loricaria. Rd July 14.
In Biglow, v. 1, no. 4, p. 290. Aug. 1817.

RAFINESQUE, C. S., and TORREY, John, and KNEVELS, J. V. . . . . . . Report on the exploration of the region between the Fishkill and the Catskill Mountains. . . . Rd July 14.
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————. Description of a new species of Usnea from New South Shetland.
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See also Long Exped. to Rockies (1819).

Clinton, De Witt. Description of a new species of fish from the Hudson River. A. v. 1, pt. 1, p. 49–50, illus. Rd Sept. 29.

Clupea Hudsonia.

Cozzens, Issacher. Examination of the acid of the Rhus glabrum, with observations on the juice of the Sambicus Canadensis, as a delicate test . . . A. v. 1, pt. 1, p. 42–5. Rd Oct. 6.

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Le Conte, John. Description of a new species of Siren, with some observations on animals of a similar nature. A. v. 1, pt. 1, p. 52–8, 1 pl. Rd Dec. 1.

Schweinitz, L. D. de. An analytical table to facilitate the determination of the hitherto observed North American species of the genus Carex. A. v. 1, pt. 1, p. 62–71. Rd Dec. 8.

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Named Saccopharynx.

De Kay, J. E. Observations on the Stylephorus chordatus of Shaw . . . Rd Feb. 17.
In Amer. J. Sc. v. 9, no. 2, p. 390–91. June, 1825.

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In Amer. J. Sc. v. 9, no. 2, p. 391. June, 1825.

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Torrey, John. An account of the Columbite of Haddam, Connecticut, with notices of several other North American minerals. A. v. 1, pt. 1, p. 89–93, illus. Rd Mar. 1.

De Kay, J. E. An account of the Phoca cristata recently taken in the vicinity of this city. A. v. 1, pt. 1, p. 94–9, 1 pl. Rd Mar. 1.

*Madianna, I. B. R. Researches and experiments on some species of the genus Passiflora. A. v. 1, pt. 1, p. 127–31. Rd Mar. 8.

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In Amer. J. Sc. v. 10, no. 1, p. 198. Nov. 1825.

Ludlow, E. G., and King, F. G. Appearances on dissection of the Phoca cristata. A. v. 1, pt. 1, p. 99–103. Rd Mar. 15.

Le Conte, John. Observations on the North American species of the genus Gratiola. A. v. 1, pt. 1, p. 103–8. Rd Mar. 22.

*Bigsby, J. J. A list of minerals and organic remains, occurring in the Canadas. Rd Mar. 29.
In Amer. J. Sc. (1818), v. 8, no. 1, art. 2, p. 60–88. May, 1824.

Barnes, D. H. Notice of several species of shells. A. v. 1, pt. 1, p. 131–40, illus. Rd April 5.
Cont. rd Dec. 26, 1825 (q.v.) below.

Cooper, William. On the remains of the Megatherium recently discovered in Georgia. A. v. 1, pt. 1, p. 114–24, 1 pl. Rd April 19.
Collected by Joseph C. Habersham of Savannah.

Halsey, Abraham. Remarks on certain entozoical fungi. A. v. 1, pt. 1, p. 125–26. Rd April 19.

Totten, J. G. Notes on some new supports for minerals subjected to the action of the common blowpipe. A. v. 1, pt. 1, p. 109–14. Rd April 26.

Le Conte, John. Observations on the North American species of the genus Ruellia. A. v. 1, pt. 1, p. 140–42. Rd May 3.

Cooper, William. Account of a discovery of the skeleton of the Mastodon giganteum . . . A. v. 1, pt. 1, p. 143–47, 1 pl. Rd May 10.
Extracted from a ''Report'' made by Messrs. Cooper, Van Rensselaer & De Kay, of a skeleton found at Eatontown, Monmouth Co., N. J. Mar. 1823.

Granger, Ralph. . . . Variety of Corydalis formosa . . . Rd May 10.
In Amer. J. Sc. v. 10, no. 1, p. 199. Nov. 1825.

Torrey, John. Description of some new grasses, collected by E. James . . . during Major Long's expedition to the Rocky Mountains in 1819–1820. A. v. 1, pt. 1, p. 148–56, 1 pl. [20 fig.]. Rd May 17.
See also Long's Exped. to the Rockies (1819).

Cozzens, Frederick. . . . New locality of Cyanite. . . . Rd May 17.
In Amer. J. Sc. v. 10, no. 1, p. 200. Nov. 1825.

Van Rensselaer, Jeremiah. Notice of a new locality of the . . . serpentine from Newbury, Mass. Rd June 14.
In Amer. J. Sc. v. 10, no. 1, p. 200. Nov. 1825.

Cozzens, Issacher. On the Encyclus eolus, a new species of fish from the Hudson. Rd [June 21.]
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Emmons, Ebenezer. . . . Descriptive catalogue of minerals presented by Dr Emmons of Chester, Mass. . . . Rd June 21.
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Jessup, A. E. . . . Notice of localities of minerals in Massachusetts . . . Rd June 21.
In Amer. J. Sc. v. 10, no. 1, p. 200. Nov. 1825.

Clinton, De Witt, and Audubon, J. J. On the Hirundo fulva of Vieillot, with some general remarks on the birds of this genus. A. v. 1, pt. 1, p. 156–66. Rd Aug. 9.

Note by Audubon, p. 163–66.

Audubon, J. J. Facts and observations connected with permanent residence of swallows in the United States. A. v. 1, pt. 1, p. 166–68. Rd. Aug. 16.

Le Conte, John. Description of some new species of North American insects. A. v. 1, pt. 1, p. 169–73, 1 col. pl. [20 fig.]. Rd Nov. 8.

(Note by Say, in Maclurian Lyc. Phila. Contrib. v. 1, p. 38–9. July, 1827).

Van Rensselaer, Jeremiah. Notice of fossil Crustacea from New Jersey . . . A. v. 1, pt. 2, p. [195]–98, 249, 1 pl. Rd Nov. 15, 1824 & Jan. 24, 1825.

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De Kay, J. E., and Renwick, James. Observations on the structure of Trilobites and description of an apparently new genus by J. E. De Kay; with notes on the geology of Trenton Falls, by James Renwick. A. v. 1, pt. 1, p. 174–89, 2 pl. Rd Nov. 22.

De Kay, p. 174–85; Renwick, p. 185–89.

Cozzens, Frederick. Observations on the manners of the Hystrix dorsata, or porcupine of North America. A. v. 1, pt. 1, p. 190–92. Rd Nov. 22.

Harlan, Richard. Further observations on the Amphiuma Means. A. v. 1, pt. 2, p. 269–70, 1 pl. Rd Dec. 6.

*Bigsby, J. J. A sketch of the geology of the island of Montreal. A. v. 1, pt. 2, p. 198–219. Rd Dec. 13.

See also Merrill, (1), p. 265. (See Annot. Bib.)

Schweinitz, L. D. de, and Torrey, John. A monograph of the North American species of Carex; ed by John Torrey. A. v. 1, pt. 2, p. 283–[374]. Rd Dec. 13.

Introduction by Torrey, dated May 28, 1825. Contains 113 species. Note by Schweinitz, p. [374], Dec. 20, 1825.

Harlan, Richard. Observations on the genus Salamandra, with the anatomy of the Salamandra gigantea (Barton) or S. Alleghaniensis (Michaux) and two new genera proposed. A. v. 1, pt. 2, p. 222–34, 270–71, 3 pl. Rd Dec. 27.

1825 Schoolcraft, H. R. Remarks on native silver from Michigan. A. v. 1, pt. 2, p. 247–48. Rd Jan. 3.

Cooper, William. Description of a new species of grosbeak, inhabiting the northwestern territory of the United States. A. v. 1, pt. 2, p. 219–22. Rd Jan. 10.

Say, Thomas. Description of new American species of the genera Buprestis, Trachys and Elater. A. v. 1, pt. 2, p. 249–68. Rd Jan. 17.

Harlan, Richard. Description of a new genus of mammiferous quadrupeds of the order Edentata. A. v. 1, pt. 2, p. 235–46, 3 pl. Rd Jan. 24.

Clamphorus truncatus. [14 fig.]

Le Conte, John. Remarks on the American species of the genera Hyla and Rana. A. v. 1, pt. 2, p. 278–82. Rd May 16.

*Greville, R. K. Descriptions of some new plants belonging to the orders Musci and Hepaticae. A. v. 1, pt. 2, p. 271–78, 1 pl. Rd May 30.

Barnes, D. H. An arrangement of the genera of Batrachian animals, with a description of the more remarkable species, including a monograph of the doubtful reptiles. Rd in July.

In Amer. J. Sc. (1818), v. 11, no. 2, art. 9, p. 268–97. Oct. 1826.

De Kay, J. E. Observations on a fossil crustaceous animal of the order Branchiopoda. A. v. 1, pt. 2, p. 375–77, 1 pl. Rd Dec. 12.

Cozzens, Issacher. Examination of iron ores from the northern part of the state of New York. A. v. 1, pt. 2, p. 378–83. Rd Dec. 19.

Barnes, D. H. Notes on shells. A. v. 1, pt. 2, p. 383–86. Rd Dec. 26.

Cont. from art. rd Apr. 5, 1824 (q.v. above).

1826 Bonaparte, C. L. The genera of North American birds and a synopsis of the species found within the territory of the United States, systematically arranged in orders and families. A. v. 2, p. [7]–126, [293]–451. Rd Jan. 24, 1826 & Jan. 1827.

See also his art. rd Nov. 6, 1826 (below).
Abstr. rd before Maclurian Lyc. Phila. (1826), Nov. 7, 1826.
In its Contr. v. 1, no. 1, p. 8–34. Jan. 1827.

Le Conte, John. On the North American plants of the genus Tillandsia, with descriptions of three new species. A. v. 2, p. 129–32. Rd Aug. 21.

———. Description of a new species of Siren (S. intermedia). A. v. 2, p. 133–34, 1 pl. Rd Aug. 21.

———. Observations on the North American species of the genus Viola. A. v. 2, p. 135–53. Rd Oct. 9.

Bonaparte, C. L. Further additions to the Ornithology of the United States and observations on the nomenclature of certain species. A. v. 2, p. 154–61. Rd Nov. 6.

See his art. above rd Jan. 24, 1826.

Torrey, John. Some account of a collection of plants made during a journey to and from the Rocky Mountains in the summer of 1820 by E. P. James, M.D. A. v. 2, p. 161–254. Rd Dec. 11.

Enumerated 481 species. See also Long Exped. to the Rockies (1819).

De Kay, J. E. Anniversary address on the progress of the natural sciences in the United States, delivered before the Lyceum of Natural History of New York, Feb. 1826. N. Y. G. & C. Carvill, 1826. 78 p.

Mitchill, S. L. Catalogue of the organic remains which with other geological and some mineral articles were presented to the New York Lyceum of Natural History, in August, 1826, by their associate, S. L. Mitchill. N. Y. Printed by J. Seymour, 1826. 40 p.

———. A discourse on the character and services of Thomas Jefferson, more especially as a promoter of natural and physical science, pronounced, by request, before the New York Lyceum of Natural History, on the 11th day of October, 1826. N. Y. G. & C. Carvill, 1826. 67 p.

1827 Bull, Lucius. . . . Specimens illustrating the Lehigh coal formation . . . Rd in Jan.
In Amer. J. Sc. v. 13, no. 2, p. 378. Jan. 1828.

Barnes, D. H. Five varieties of clay from . . . near Augusta, Ga. . . . Rd in Feb.
In Amer. J. Sc. v. 13, no. 2, p. 378. Jan. 1828.

Delafield, Joseph. . . . Discovery of Alcyonium in a green sand formation, near Annapolis, Md. . . . Rd in Feb.
In Amer. J. Sc. v. 13, no. 2, p. 379. Jan. 1828.

De Kay, J. E. On the Lepidopus caudatus . . . Rd in Feb.
In Amer. J. Sc. v. 13, no. 2, p. 379. Jan. 1828.

Delafield, Joseph. . . . Suite of thirty specimens illustrating the mineralogy of the region near Easton, Pa. . . . Rd in March.
In Amer. J. Sc. v. 13, no. 2, p. 379. Jan. 1828.

Le Conte, John. . . . Observations on the plants of the genus Tillandsia . . . and the Siren Intermedia . . . Rd in March.
In Amer. J. Sc. v. 13, no. 2, p. 379. Jan. 1828.
See his art. rd Aug. 21, 1826 (above).

Dana, J. F. Account of some experiments on the root of the Sanguinaria Canadensis. A. v. 2, p. 245–52. Rd April 2.

———. Analysis of a copper ore of Franconia, N. H., with remarks on pyritous copper. A. v. 2, p. 253–58. Rd April 2.

Woodbury, Dr. . . . On the clover seed of a peculiar species . . . Rd in April.
In Amer. J. Sc. v. 13, no. 2, p. 380. Jan. 1828.

Cooper, William. . . . On the boa constrictor . . . Rd in April.
In Amer. J. Sc. v. 13, no. 2, p. 380. Jan. 1828.

Delafield, Joseph. . . . Crystallized Brucite from Franklin, N. J. . . . Rd in April.
In Amer. J. Sc. v. 13, no. 2, p. 380. Jan. 1828.

Swift, Dr. Specimens of bituminous coal from Tioga County, N. Y. . . . Rd in April.
In Amer. J. Sc. v. 14, no. 1, p. 191. Apr. 1828.

Hunt, Seth. . . . Specimens illustrating the geology of Alabama . . . Rd in April.
In Amer. J. Sc. v. 14, no. 1, p. 191. Apr. 1828.

Van Rensselaer, Jeremiah. On a larva in the human body. Rd in April.
In Amer. J. Sc. (1818), v. 13, no. 2, art. 4, p. 229–34. Jan. 1828.

————. . . . On Oolite . . . in Alabama . . . Rd May 14.
In Amer. J. Sc. v. 14, no. 1, p. 191. Apr. 1828.

Delafield, Joseph. Fossil organic remains from Lake Huron . . . specimens of Alcyonium from Warminster, England . . . Rd May 14.
In Amer. J. Sc. v. 14, no. 1, p. 191. Apr. 1828.

Smith, J. A. Account of the dissection of a Proteus of the Lakes (Menobranchus); with remarks on the Siren Intermedia. A. v. 2, p. 259–63. Rd May 14.

Mitchill, S. L. Description of an apparently new species of Diodon. A. v. 2, p. 264–65. Rd May 28.

Porter, Jacob. A collection of minerals, insects, reptiles . . . Rd in June.
In Amer. J. Sc. v. 14, no. 1, p. 192. Apr. 1828.

Mitchill, S. L. Additional remarks on Solanum laurentii (St. Lorenzo potato) . . . Rd in June.
In Amer. J. Sc. v. 14, no. 1, p. 192. Apr. 1828.

Van Rensselaer, Jeremiah. . . . Locality of serpentine, amianthus, granite, in situ, on the island of N. Y. Rd in June.
In Amer. J. Sc. v. 14, no. 1, p. 192. Apr. 1828.

McAuley. Specimens illustrating the mineralogy and geology of the valley of the Mohawk . . . Rd in June.
In Amer. J. Sc. v. 14, no. 1, p. 192. Apr. 1828.

De Kay, J. E. Notes on a fossil skull in the Cabinet of the Lyceum, of the genus Bos, from the banks of the Mississippi; with observations on the American species of that genus. A. v. 2, p. 280–91. Rd July 9.

Cooper, William. Note on the habitat of the Schizea pusilla of Pursh. A. v. 2, p. 266–67. Rd July 16.

————. Further discovery of fossil bones in Georgia; and remarks on their identity with those of Megatherium of Paraguay. A. v. 2, p. 267–70. Rd July 23.

Mitchill, S. L., and others. Discovery of a fossil walrus in Virginia—report of Messrs Mitchill, J. A. Smith, and William Cooper, on a fossil skull sent to Dr Mitchill by Mr Cropper of Accomac Co., Va. A. v. 2, p. 271–72. Rd Aug. 7.

De Kay, J. E. Report on several fossil multilocular shells from . . . Delaware; with observations on a second specimen of the new fossil, genus Eurypterus. A. v. 2, p. 273–79, 1 pl. Rd Oct. 1.

Barnes, D. H. Note on the Murex corona of Gmelin. A. v. 2, p. 291–92. Rd Oct. 8.

De Kay, J. E. On the supposed transportation of rocks. Rd in Oct.
In Amer. J. Sc. (1818), v. 13, no. 2, art. 10, p. 348–50. Jan. 1828.

Torrey, John. Chemical examination of some minerals chiefly from America, by Thomas Thomson, M.D.; with notes respecting localities, history, etc., by John Torrey, M.D. A. v. 3, p. [9]–86. Rd Nov. 5.

Barnes, D. H. Reclamation of Unios. Rd Nov. 12.
In Amer. J. Sc. (1818), v. 13, no. 2, art. 13, p. 358–64. Jan. 1828.

1828 Delafield, Joseph. Mr Featherstonhaugh's collection of fossils, minerals . . . Rd in Jan.
In Amer. J. Sc. v. 15, no. 1, p. 193. Oct. 1828.

Halsey, Abraham. Lectures on botany . . . Rd in Feb. & Mar.
In Amer. J. Sc. v. 15, no. 1, p. 193. Oct. 1828.

De Kay, J. E. On a singular mal-formation observed in the teeth of the Arctomys monax . . . Rd in April.
In Amer. J. Sc. v. 15, no. 1, p. 193. Oct. 1828.

Carter, N. H. . . . On the minerals and the plants and animals collected on the Island of Cuba . . . Rd in May.
In Amer. J. Sc. v. 15, no. 2, p. 357. Jan. 1829.

Featherstonhaugh, G. W. . . . Observations on the remarkable fossil deposits of Stonesfield and Tilgate Forest . . . Rd in June.
In Amer. J. Sc. v. 15, no. 2, p. 358–59. Jan. 1829.

De Kay, J. E. . . . Description of a large species of Squalus recently captured on the American coast . . . Rd in June.
In Amer. J. Sc. v. 15, no. 2, p. 359. Jan. 1829.

Barnes, D. H. . . . Facts respecting serpentine boulders scattered about on the surface at East Chester, N. Y. Rd in June.
In Amer. J. Sc. v. 15, no. 2, p. 359. Jan. 1829.

Morgan, G. C. . . . Skeleton of the Capromys prehensilis and land shells from Cuba . . . Rd in June.
In Amer. J. Sc. v. 15, no. 2, p. 359. Jan. 1829.

Barnes, D. H. Report on the Helices of the West Indies . . . Rd in July.
In Amer. J. Sc. v. 16, no. 1, p. 205. Apr. 1829.

De Kay, J. E. On two fossil Ammonites from the Red River and Cahawba (Ala.) . . . Rd in July.
In Amer. J. Sc. v. 16, no. 1, p. 206. Apr. 1829.

Featherstonhaugh, G. W. Specimen of transition limestone charged with organic remains . . . at Duanesburgh, N. Y. Rd in August.
In Amer. J. Sc. v. 16, no. 1, p. 206. Apr. 1829.

De Kay, J. E. Amended description of the Amia calva of Linn. . . . Rd in August.
In Amer. J. Sc. v. 16, no. 1, p. 206. Apr. 1829.

Featherstonhaugh, G. W. . . . Report on specimens presented by Dr Swift of the U. S. Navy . . . Rd in Sept.
In Amer. J. Sc. v. 16, no. 1, p. 206. Apr. 1829.

De Kay, J. E. Description of a new reptile . . . Leposternum oxyrhynchus. Rd in Sept.
In Amer. J. Sc. v. 16, no. 1, p. 207. Apr. 1829.

————. Description of a fresh water fish of the Linnaean genus Gadus from Lake Superior . . . Rd in Oct.
In Amer. J. Sc. v. 16, no. 1, p. 207. Apr. 1829.

Jackson, C. T. . . . Minerals collected by . . . illustrating the geology and mineralogy of Nova Scotia and part of Massachusetts. Rd in Oct.
In Amer. J. Sc. v. 16, no. 1, p. 207–8. Apr. 1829.

Mitchill, S. L. The history of sea-serpentism . . . Rd in Oct.
In Amer. J. Sc. (1818), v. 15, no. 2, art. 9, p. 351–56. Jan. 1829. Extracted from his "Summary of the progress of the natural sciences within our U. S. for a few years past."

Cooper, William, and Cozzens, Frederick. On a mass of tertiary rock from the shore of the Potomac, sixty miles south of Washington, D. C. . . . Rd in Nov.
In Amer. J. Sc. v. 16, no. 1, p. 208. Apr. 1829.

Williams, J. L. Specimens illustrative of the geology of Florida . . . Rd in Nov.
In Amer. J. Sc. v. 16, no. 1, p. 209. Apr. 1829.

Totten, J. G. Specimen of fossil plants from the slate formation of Rhode Island . . . Rd in Nov.
In Amer. J. Sc. v. 16, no. 1, p. 209. Apr. 1829.

Van Rennselaer, Jeremiah. On a larva in the human body . . .
In Amer. J. Sc. (1818), v. 13, no. 2, art. 4, p. 229–34. Jan. 1828.

De Kay, J. E. On the fossil tooth of an elephant found near the shore of Lake Erie, and on the skeleton of a Mastodon lately discovered in the Delaware and Hudson Canal.
In Amer. J. Sc. (1818), v. 14, no. 1, p. 31–3. Apr. 1828.

1829 Delafield, Joseph. Observations on fossils . . . from the coal slate of Rhode Island . . . Rd in Jan.
In Amer. J. Sc. v. 16, no. 2, p. 354–55. July, 1829.

Halsey, Abraham. Public lecture on botany . . . Rd in Jan.
In Amer. J. Sc. v. 16, no. 2, p. 355. July, 1829.

Eights, James. . . . Specimens of a singular variety of quartz crystal from Palestine . . . Rd in Jan.
In Amer. J. Sc. v. 16, no. 2, p. 355. July, 1829.

DELAFIELD, Joseph. Memorial to the N. Y. State Legislature requesting an efficient examination of the mineral formation of the state, particularly for bituminous coal . . . Written Feb. 2, 1829.
In Amer. J. Sc. (1818), v. 16, no. 2, p. 358–60. July, 1829.

COMMITTEE. Report of a . . . to the N. Y. Lyceum of Natural History on the examination of Audubon's ''Birds of America'' . . .
In Amer. J. Sc. (1818), v. 16, no. 2, p. 353–54. July, 1829.

PITCHER, Dr [Zina]. Collection of reptiles and other geological objects collected at Fort Brady on the northwestern frontier . . . Rd in April.
In Amer. J. Sc. v. 16, no. 2, p. 356. July, 1829.

COOPER, William. Report on several mammalia and reptiles sent from the Northwest Territory by Messrs Schoolcraft, James and Pitcher . . . Rd in May.
In Amer. J. Sc. v. 16, no. 2, p. 356. July, 1829.

WILLIAMS, J. L. . . . On the supposed chalk formation of Florida . . . Rd in May.
In Amer. J. Sc. v. 16, no. 2, p. 358. July, 1829.

DE KAY, J. E. Remarks on certain phenomena exhibited upon the surface of the primitive rocks in the vicinity of this city . . . Rd in May.
In Amer. J. Sc. v. 16, no. 2, p. 357. July, 1829.

ALLEN, T. P. Specimens of proto-carbonate of iron from Baltimore . . . manganese from Brookville, Md., . . . and sulphuret of lead from Eaton, N. H. . . . Rd in May.
In Amer. J. Sc. v. 16, no. 2, p. 357. July, 1829.

DARLINGTON, William. Remarks on the Prunus Americana of Marshall. A. v. 3, p. 87–90, 1 pl. Rd May 18.

HALSEY, Abraham. Branches of the Tilia Americana and Glaeditschia tricanthas, injured by an insect allied to the Lamia destructor . . . Rd in June.
In Amer. J. Sc. v. 18, no. 1, p. 193. Apr. 1830.

COOPER, William, and TORREY, John. . . . Specimens of 100 species of plants collected in Kentucky, Tennessee and Virginia during August and September, 1828 . . . Rd in June.
In Amer. J. Sc. v. 18, no. 1, p. 193. Apr. 1830.

NASH, Alanson. On the gold region of the southern states . . . Rd in Oct.
In Amer. J. Sc. v. 18, no. 1, p. 194. Apr. 1830.

PITCHER, Dr [Zina]. . . . Collection of Mammalia . . . in vicinity of Fort Gratiot . . . Rd in Nov.
In Amer. J. Sc. v. 18, no. 1, p. 194. Apr. 1830.

LE CONTE, John. Description of the species of North American tortoises. A. v. 3, p. 91–131. Rd Dec. 7.

————. Description of a new genus of the species of the order Rodentia. A. v. 3, p. 132–33, 1 pl. Rd Dec. 21.

1830 De Kay, J. E. On the remains of the extinct reptiles of the genera Mosasaurus and Geosaurus found in the Secondary formation of New Jersey; and on the occurrence of the substance recently named Coprolite by Dr Buckland, in the same locality. A. v. 3, p. 134–41, 1 pl. Rd Jan. 11 & 25.

Le Conte, John. Observations on the United States' species of the genus Pancratium. A. v. 3, p. 142–47, 1 pl. Rd Jan. 25.

De Kay, J. E. Additional observations on the teeth of Mosasaurus . . . Rd in April.
In Amer. J. Sc. v. 19, no. 1, p. 159. Oct. 1830.

Cooper, William. . . . Two young skulls of an extinct animal lately found in Kentucky and N. Y. resembling the Mastodon . . . Rd in April.
In Amer. J. Sc. v. 19, no. 1, p. 159–60. Oct. 1830.

Halsey, Abraham, and Shillaber, John. . . . One thousand specimens of plants from Java . . . Rd in May.
In Amer. J. Sc. v. 19, no. 1, p. 160. Oct. 1830.

Halsey, Abraham. Observations on the habits of the insect which attacks the . . . locust (Gleditschia) . . . Rd in Sept.
In Amer. J. Sc. v. 19, no. 2, p. 354. Jan. 1831.

Torrey, John. On a species of Euphorbia . . . from Pennsylvania . . . and Campanula from New Orleans . . . Rd in October.
In Amer. J. Sc. v. 19, no. 2, p. 354. Jan. 1831.

Delafield, Joseph. Verbal account of certain remarkable sutures . . . in gneiss rocks of New York . . . Rd in Oct.
In Amer. J. Sc. v. 19, no. 2, p. 354. Jan. 1831.

1831 De Kay, J. E. Examination of the facts and arguments by which it is attempted to prove that lava has not been subjected to great elevations of temperature . . . Rd in Jan.
In Amer. J. Sc. v. 27, no. 1, p. 148. Oct. 1834.

Cooper, William. . . . Notice of several birds seen in the neighborhood of New York during the past winter . . . Rd in March.
In Amer. J. Sc. v. 27, no. 1, p. 149. Oct. 1834.

Le Conte, John. On two species of Unio . . . Rd in March.
In Amer. J. Sc. v. 27, no. 1, p. 149. Oct. 1834.

Cooper, William. 1) Catalogue of birds in the vicinity of New York . . . 2) Bones . . . recently discovered at Big Bone Lick, Ky. . . . Rd in May.
In Amer. J. Sc. v. 27, no. 1, p. 149. Oct. 1834. (2) Also in Mthly Amer. Jour. Geol. & Nat. Sc. (1831), v. 1, p. 43–4, 158–74. July & Oct. 1831 (q.v.).

1832 Schweinitz, L. D. de. Remarks on the plants of Europe which have become naturalized in a more or less degree in the United States. A. v. 3, p. [148]–55. Rd in Jan.

Cooper, William. . . . On the anatomy of the wild swan . . . of Long Island . . . Rd in January.
In Amer. J. Sc. v. 27, no. 1, p. 150. Oct. 1834.

———— and Harlan, Richard. On the fossil Megalonyx, chiefly from White Cave, Ky. . . . Rd in May.
In Amer. J. Sc. v. 27, no. 1, p. 151. Oct. 1834.

*Finch, John. . . . Some geological observations on the region in the vicinity of Lake Erie and the River St. Lawrence . . . Rd in June.
In Amer. J. Sc. v. 27, no. 1, p. 151. Oct. 1834.

Browne, D. J. . . . Locality of Fulgorite near Duxbury, Mass. . . . Rd in June.
In Amer. J. Sc. v. 27, no. 1, p. 151. Oct. 1834.

Boyd, G. W. Observations on the mineralogy and geology of the gold region of the southern states. Rd in June.
In Amer. J. Sc. v. 27, no. 1, p. 151. Oct. 1834.

Sampson, William. Notice of a cetaceous animal supposed to be new to the American coast. Rd Nov. 4.
In Amer. J. Sc. (1818), v. 23, no. 2, p. 301–3, illus. Jan. 1833.

1833 De Kay, J. E. Observations on a fossil jaw of a species of Gavial, from West Jersey. A. v. 3, p. 156–65, illus. Rd in Jan.

Cooper, William. A report on some fossil bones of the Megalonyx, from Virginia; with a notice of such parts of the skeleton of this animal as have hitherto been discovered, and remarks on the affinities which they indicate. A. v. 3, p. [166]–73. Rd in Jan.

Troost, Gerard. On a new genus of serpents, and two new species of the genus Heterodon, inhabiting Tennessee. A. v. 3, p. 174–90. Rd in April.

1834 Torrey, John. A trilobite found at Utica, in a carboniferous limestone of Eaton . . . Rd Jan. 27.
In Amer. J. Sc. v. 27, no. 1, p. 155. Oct. 1834.

Bachman, John. MS on the powers of sight and scent possessed by the turkey buzzard (Cathartes aura) and the black vulture (Cathartes atrata). Rd Feb. 3.
In Amer. J. Sc. v. 27, no. 1, p. 156. Oct. 1834.

Cooper, William. . . . A collection of eggs of birds breeding in the vicinity of N. Y. Rd Oct. 20.
In Amer. J. Sc. v. 28, no. 1, p. 190. Apr. 1835.

Gray, Asa. A monograph of the North American species of Rhynchospora. A. v. 3, p. 191–220, 1 pl. [30 fig.]. Rd Dec. 15.

————. A notice of some new, rare or otherwise interesting plants, from the northern and western portions of the state of New York. A. v. 3, p. 221–38. Rd in Dec.

Barratt, Joseph. Monograph on the genus Salix . . . Rd in Dec.
In Amer. J. Sc. v. 28, no. 1, p. 191. Apr. 1835.

1835 Torrey, John. Discovery of the Vauquelenite, a rare ore of Chromium, in the United States. A. v. 4, p. 76–9. Rd April 27.

1836 Dana, J. D. A new mineralogical nomenclature. A. v. 4, p. [9]–34. Rd in March.

Torrey, John. Monograph of North American Cyperaceae. A. v. 3, p. [239]–448. Rd Aug. 8.

Index on p. 444–48. Supplement on p. [430]–43.

Croom, H. B. Observations on the genus Sarracenia, with an account of a new species. A. v. 4, p. [95]–104, 1 col. pl. Rd Sept. 5.

Downing, A. J. Remarks on the natural order Cycadae, with a description of the ovula and seeds of Cycas revoluta, Willd. Rd Oct. 17.

In Amer. J. Sc. (1818), v. 32, no. 1, p. 45–52, 2 pl. April, 1837.

Gray, Asa, and *Corda, A. J. C. A translation of a memoir entitled ''Beitrage zu lehre von der befruchtung der pflanzen'' (Contributions to the doctrine of the impregnation of plants) by A. J. C. Corda (from the 17th volume of the Nova Acta of the Physico-medico Academiae Caesar Leopold-Carolina Naturae Curiosum), with prefatory remarks on the progress of discovery relative to vegetable fecundation, by Asa Gray. Rd Oct. 24.

In Amer. J. Sc. (1818), v. 31, no. 2, p. 308–23. Jan. 1837.

Redfield, J. H. Fossil fishes of Connecticut and Massachusetts, with a notice of an undescribed genus. A. v. 4, p. 35–40. Rd Dec. 12.

Ward, J. F. Notice of the appearance of the Pine grosbeak, Pyrrhula enucleator, in the environs of New York. A. v. 4, p. [51]–2. Rd Dec. 19.

1837 Gray, Asa. Melanthacearum Americae septentrionalis revisio. A. v. 4, p. [105]–40.

Cooper, William. Descriptions of five species of Vespertilio that inhabit the environs of the city of New York. A. v. 4, p. [53]–63. Rd Feb. 6.

Gray, Asa. Remarks on the structure and affinities of the order Ceratophyllaceae. A. v. 4, p. 41–50. Rd Feb. 20.

Cooper, William. On two species of Molossus inhabiting the southern United States. A. v. 4, p. [64]–70, illus. Rd Feb. 20.

————. On two species of Plecotus inhabiting the United States territory. A. v. 4, p. [71]–5, illus. Rd April 3.

1839 Redfield, W. C., and Jay, J. C. Report on the shells and minerals presented by Dr Brinckerhoff to the New York Lyceum of Natural History.

In Amer. J. Sc. (1818), v. 38, no. 1, p. 198–201. Jan. 1840.

Delafield, Joseph. Report upon the minerals, geological specimens and fossils, from the Island of St. Lorenzo, presented to the New York Lyceum of Natural History.

In Amer. J. Sc. (1818), v. 38, no. 1, p. 201–2. Jan. 1840.

1840 Lee, C. A. An account of a Filaria in a horse's eye, with remarks on similar phenomena, and the mode of their origin. Rd June 24.
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1841 Johnston, John. Notice of a variety of Beryl, recently discovered at Haddam, Conn. . . . Rd Jan. 11.
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————. Note on the geographical distribution of the terrestrial mollusks which inhabit the Island of St. Thomas, W[est] I[ndies]. A. v. 6, art. 12, p. 74–5. Rd Mar. 6.

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———. Description of a new generic form of Gobinae from the Amazon River. A. v. 7, art. 10, p. 45–8. Rd Jan. 31.

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1865 STEVENS, R. P. Report upon the past and present history of the geology of New York Island. A. v. 8, art. 10, p. 108–20, illus. Rd Jan. 16.

PRIME, Temple. Description of a new species of Mollusca, of the genus Glauconome. A. v. 8, art. 9, p. 107–8, illus. Rd April 3.

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LAWRENCE, G. N. Descriptions of six new species of birds from Central America. A. v. 8, art. 20, p. 170–84. Rd Oct. 23.

MORSE, E. S. Descriptions of new species of Pupadae. A. v. 8, art. 26, p. 207–12, illus. Rd Nov. 20.

GROTE, A. R. Remarks on the Sphingidae of Cuba, and description of a new species of Ambulyx from Brazil. A. v. 8, art. 25, p. 195–207. Rd Nov. 27.

WASHINGTON BOTANICAL SOCIETY (1817)

History

"A meeting was held this day, Thursday, March 13, 1817, at Davis's Tavern, pursuant to public notice for the purpose of forming a Botanical Society,—Doctor John A. Brereton being called to the chair, and John Underwood appointed secretary . . ."

"A committee consisting of Rev. Dr James Laurie, George Watterston, and Dr Alexander McWilliams composed the committee for drawing up the constitution . . . It was named the Washington Botanical Society." From COVILLE, (q.v. below).

"The objects of this association shall be to collect, arrange, preserve and describe all the vegetable productions within the limits of the District of Columbia whether indigenous or exotic and to detail when practicable all their medicinal, esculent, and other properties." From its Constitution.

Its first officers were James Laurie, president; Samuel Eliot, Jr., 1st vice-president; George Watterston, secretary; John Boyle, treasurer; Alexander McWilliams, John A. Brereton, and Henry Hunt, curators.

Meetings were fairly frequent during the first four years of the Society's existence, but in 1821 they dropped to five, and there were only one each in 1823–1826. The last meeting at which the actual dissolution of the Society took place was held on March 27, 1826, at which time Dr Alexander McWilliams was president, and the Society had dwindled to six active members.

Other members of the Society at one time or other during its history were J. M. Moore, J. W. Hand, W. A. Bradley, William Elliot, James Kearney, John Underwood, Ann Davis, Nicholas Worthington, James Thompson, Rod. Schaer, Joseph Mulligan.

A complete history of the Society, containing a reprint of the Constitution still in manuscript and other important material may be found in the article by F. V. Coville cited in the Bibliography below.

Some of the members of this defunct society, in 1825, organized themselves into a new organization known as the Botanic Club, Washington (1825), q.v.

The original records of the Society have been deposited in the MS division of the Library of Congress.

Bibliography & Publications

1817 [WASHINGTON BOTANICAL SOCIETY. Constitution . . . Wash. 1817.]

In MS. Repr. in COVILLE, p. 181–85, see below.

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296 species are described.

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THE AMERICAN JOURNAL OF SCIENCE AND ARTS, NEW HAVEN (1818)

History

''The project of the AMERICAN JOURNAL OF SCIENCE AND ARTS was first suggested by Col. Gibbs, in November, 1817, during an accidental interview on board the steamboat Fulton, in Long Island Sound. The AMERICAN MINERALOGICAL JOURNAL (1810), q.v., by the late Dr Archibald Bruce (our earliest purely scientific Journal) . . . never passed beyond one volume . . . It was thought that we ought not to lose the advantage already gained, and that a high demand of duty required that some man devoted to science, should undertake to sustain its interests and those of the connected arts, in our rising country . . .

''This Journal first appeared in July, 1818, and in June, 1819, the first volume of four numbers and 448 pages was completed . . .

This scale of publication, originally deemed sufficient, was found inadequate to receive all the communications, and as the receipts proved insufficient to sustain the expenses, the work having but three hundred and fifty subscribers, was at the end of the year, abandoned by the publishers.

''An unprofitable enterprise not being profitable to the trade, ten months elapsed before another arrangement could be carried into effect, and therefore no. 1 of volume 2 was not published until April, 1820. The new arrangement was one of mutual responsibility for the expenses, but the Editor was constrained nevertheless to pledge his own personal credit to obtain from a bank the funds necessary to begin again, and from this responsibility, he was for a series of years, seldom released. The single volume per annum being found insufficient for the communications, two volumes a year were afterwards published, commencing with the second volume . . .'' Extracts from SILLIMAN, Benjamin. History of the Journal. v. 50, pref. p. 3–4. 1847. (See Bibliography, 1847, below.)

The ''Plan of the work'' is outlined in the preface to volume 1, July, 1818, as follows (with especial reference to natural history):

"This Journal is intended to embrace the circle of the physical sciences, with their application to the Arts, and to every useful purpose.

It is designed as a deposit for original communications; but will contain also occasional selections from foreign journals . . . Within its plan are embraced:

NATURAL HISTORY, in its three great departments of mineralogy, botany, and zoology.

Chemistry and natural philosophy, in their various branches; and mathematics, pure and mixed.

It will be a leading part to illustrate American natural history, and especially our mineralogy and geology.

The application of these sciences are obviously as numerous as physical arts, and physical wants . . .

While Science will be cherished for its own sake, and with a due respect for its own inherent dignity; it will also be employed as the handmaid to the arts . . .

Notices, Reviews, and Analyses of new and scientific works, and of new inventions, and specifications of Patents.

Biographical and obituary notices of scientific men; essays on Comparative anatomy and physiology, and generally on such branches of medicine as depend on scientific principles . . .

Learned societies are invited to make this Journal, occasionally the vehicle of their communications to the Public . . ." EXTRACTS from v. 1, pref. p. 5–6. July, 1818, by SILLIMAN.

The exact title for volume 1 may be found below in the Bibliography. With volume 2, the title became "AMERICAN JOURNAL OF SCIENCE AND ARTS." Up to 1866, ninety (90) volumes were published, and it was commonly referred to, as SILLIMAN'S JOURNAL. Benjamin Silliman, Sr., was its editor from July, 1818, to his death in 1864.

In 1838 (v. 34), his son, Benjamin Silliman, Jr., became assistant editor. In 1846, James Dwight Dana, (v. 51), began his lifelong association with the Journal, as an editor, and as one of its most frequent contributors. Before 1866, the following were active as associate editors: Wolcott Gibbs (joined the staff in 1851, with ser. 2, v. 11), Asa Gray, (added in 1853, with ser. 2, v. 15), Louis Agassiz, (1853, ser. 2, v. 16), W. I. Burnett, (only during 1853, ser. 2, v. 16); G. T. Brush and S. W. Johnson, (in 1863, with ser. 2, v. 35).

The first series closed in 1847, with the fiftieth volume which was an Index to the preceding forty-nine, prepared by James Dwight Dana. (See Bibliography, 1847, below.)

The following Societies published abstracts of their Proceedings in the JOURNAL at various times from 1818 to 1865: New York Lyceum Natural History (1817); American Geological Society (1819); American Philosophical Society (1769); Academy of Natural Sciences of Philadelphia (1812); Connecticut Academy of Arts & Sciences (1799); Yale Natural History Society (1834); Boston Society of Natural History (1830).

In some cases, for specific periods, it was the only medium of publication available for these scientific organizations.

Extensive reviews of most of the Reports of the various state geological and natural history surveys were published in the Journal. These have been noted under the respective surveys (q.v. Table of contents).

Only the salient features in the history of the Journal have been mentioned, as the Centennial number, of July, 1918, of the Journal, and the first and succeeding chapters of "A Century of science in America," 1918, both readily accessible, contain a history of the JOURNAL from its inception to 1918. (See Bibliography, 1918, below.)

Under the "PAPERS ON NATURAL HISTORY," which follows the "BIBLIOGRAPHY," will be found a list of all the papers on natural history subjects to be found in the first ninety volumes, just as they appeared in each number, in many cases with cross-references to other places where they have been published. This list is the best evidence of the immense influence and importance of the AMERICAN JOURNAL of SCIENCE in developing and promoting the cause of natural history in the United States during the pioneer century.

"Of the services of this Journal to American science, it is not too much to say that more than any other similar publication, it had aided and stimulated our countrymen in their scientific labors, and has made their names and works familiar to men of science abroad, while through the variety and weight of its contributions, it has not only won a high reputation among contemporary journals, but it has vindicated for our country an honorable place among the communities in which science is most promoted and esteemed . . ." AMERICAN ACADEMY OF ARTS & SCIENCES. Proc. v. 6, p. 512. 1865. (Obituary of Benjamin SILLIMAN, May 30, 1865.)

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(The) AMERICAN JOURNAL OF SCIENCE, AND ARTS, conducted by Benjamin Silliman. New Haven, April, 1820–1879. v. 2–50 (1st ser.); v. 1–50 (2d ser.); & v. 1–18 (ser. 3).

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1918 AMERICAN JOURNAL OF SCIENCE. . . . Centennial number . . . 1818–1918. New Haven, July, 1918. (In its ser. 4, v. 46, no. 271, p. 1–416)

The articles included in this number were reprinted in A CENTURY of science in America (see below).

In the "Contents," citations are added for this popular reprint.

This number commemorates the hundredth anniversary of the founding of the Journal, and contains various essays respecting its history, and the contributions to the various sciences, which have appeared in its pages during this century. Contains facsimile of the original title-page.

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2) Localities of plants.
3) Remarks upon the genus Sarracenia.
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————. On the strontianite of Schoharie, N. Y., with a notice of the limestone cavern in the same place. art. 26, p. 363–70, illus.

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v. 29, no. 1, October, 4 + p. [1]–200.

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The appendix p. 149–54 is "A notice and description of the organic remains embraced in the preceding paper," by S. G. Morton. See also Merrill, p. 330–31. (See Annot Bib).

1836 **v. 29, no. 2, January, p. [201]–404.**

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Hitchcock, Edward. Fossil footsteps, in sandstone and graywacke. p. 174–76.

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Bailey, J. W. On the common blowpipe. art. 13, p. 319–25, illus.

Maury, M. F. Notice of the gold veins of the United States, mine near Fredericksburg, Virginia. art. 14, p. 325–30.

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MOULTRIE, James, and SHEPHARD, C. U. Description of the skull of the Guadaloupe fossil human skeleton, by James Moultrie, with introductory remarks by C. U. Shephard. art. 21, p. 361–64.

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ANON. Interlocking beach trees. p. 379–80.

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*FOX, R. W. Questions relative to mineral veins, submitted to practical miners. p. 135–39.

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Carpenter, W. M. Interesting fossils found in Louisiana. p. 201–3, illus.

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Hovey, S. Geology of St. Croix. art. 3, p. 64–74.

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————. On fossil Infusoria, discovered in peat-earth, at West Point, New York, with some notices of American species of Diatomae. art. 9, p. 118–24, 1 pl. [16 fig.]

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Rodman, A. B. Stilbite, chabasie, and other minerals at Stonington, Conn. p. 179–80.

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Shephard, C. U. On meteoric iron from Asheville, Buncombe County, N. C. art. 8, p. 81–4.

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MATHER, W. W. On the physical geology of the United States east of the Rocky Mountains, and on some of the causes affecting the sedimentary formations of the earth. art. 1, p. [1]–20.
Pt. 1 On the causes of the great currents of the ocean, and their influence in the transport and deposition of the sedimentary rocks of the United States.
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v. 49, no. 2, October, p. [229]–412.

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Pt 2 On the causes of elevation above the level of the sea.

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[DANA, James Dwight.] . . . General index to forty-nine volumes. New Haven, 1847. 18 + 348 p.

Preface by Benjamin Silliman, the editor, written April 19, 1847. Gives a concise account of the progress of American science from the beginning of the century to 1847.

1846 **v. 51, (ser. 2, v. 1), no. 1, January, 8+p.1[1]–152.**

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v. 51 (ser. 2, v. 1), no. 2, March, p. [153]–315.

[Dana, J. D.] Genera of fossil corals of the family Cyathophyllidae. art. 3, p. 178–89.
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*LYELL, Charles. On the delta and alluvial deposits of the Mississippi, and other points in the geology of North America, observed in the years 1845, 1846. art. 4, p. 34–9, 118–19, illus.
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*MURCHISON, R. I. A few remarks on the Silurian classification. art. 41, p. 404–7.

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*BAKEWELL, R[obert]. Observations on the whirlpool, and on the rapids below the Falls of Niagara; designed by illustrations to account for the origin of both. art. 5, p. 25–36, illus.

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*Roemer, Ferdinand. Contributions to the geology of Texas. art. 2, p. 21–8. Written Aug. 1847.

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*Verneuil, Edward de, and Hall, James. On the parallelism of the Palaeozoic rocks of North America . . . (cont.) art. 4, p. 45–51.
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*Hunt, T. S. On the acid springs and gypsum deposits of the Onondaga salt group. art. 14, p. 175–78.
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TROY LYCEUM OF NATURAL HISTORY, TROY, N. Y. (1818)

History

"In the year 1818 . . . Professor Amos Eaton . . . in company with Dr Moses Hale and Dr Ira M. Wells, of Troy, projected the incorporation of the Troy Lyceum of Natural History, for the purpose of encouraging the study and disseminating a knowledge of natural history and the other sciences. James Dalliba, Richard B. Hart, Isaac McConihe, Dr Ely Burritt, and George Tibbits, constituted a body corporate and politic by the name of the 'Troy Lyceum of Natural History.'

"At the first stated meeting on the 9th day of November, 1818, John D. Dickinson was chosen president; James Dalliba and David Buel, Jr., vice-presidents; Obed Rice, recording secretary; Dr. Amatus Robbins, corresponding secretary; Albert Pawling Heartt, treasurer; Moses Hale, Amatus Robbins and Ira Wells, curators . . .

"A year from its commencement it numbered among its members, some of the most celebrated men in the United States . . . In the fall of 1819, 'The Plough Boy,' a valuable scientific paper published in Albany, by Solomon Southwick, was the medium for the publication of its transactions. On the 7th of March, 1820, the Society was incorporated by the Legislature. The fire of 1820 destroyed the books and records of the Lyceum. Meetings were continued until 1828 in the court house, when the specimens of the Lyceum were boxed and stored away for safe-keeping, for want of a hall or other proper place to keep them in.

"In 1833, the Lyceum was resuscitated, and a hall was procured in the new Court House, and its minerals and specimens of value were again placed in cases . . ." WEISE, A. J. History of the city of Troy. 1876. p. 114–15.

A notice of the formation of the Lyceum appeared in the AMERICAN JOURNAL OF SCIENCE, v. 2, p. 173–74, April, 1820. Early proceedings of the Society were noted in the same volume, page 238, November, 1820.

C. C. Jewett, in his Notice of Public Libraries, in 1849, recorded that "the Society possesses a library, besides a valuable cabinet." Its officers at that date were Isaac McConihe, president; Thomas W. Blatchford, 1st vice-president; John Smith, corresponding secretary; Henry Rousseau, Avery J. Skilton, and William

Gurley, curators. In 1850, its Constitution, charter, etc., was published.

In 1820, under the direction of the Troy Lyceum, Amos Eaton published a second edition of his "Index to geology . . ." (see BIBLIOGRAPHY OF BOOKS: 1818, at the back of this work in v. 3.)

Many of the early papers read before the Lyceum were published in an Albany agricultural journal, the Ploughboy, a list of which will be found below under PAPERS ON NATURAL HISTORY.

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WESTERN MUSEUM SOCIETY, CINCINNATI (1818)

History

''A number of the citizens of Cincinnati have recently instituted a Society, the WESTERN MUSEUM SOCIETY, for the collection, preservation, exhibition, and illustration of natural and artificial curiosities, particularly those of the western countries. They intend to form a permanent museum. The following are the classes of objects that will especially attract their attention, and to which they invite the view of the public.

"1) Our metals and minerals generally, including petrifactions.

"2) Our indigenous animals, embracing the remains of those which are now extinct.

"3) The relics of the unknown people who constructed the ancient works of the western country.

"4) The various articles manufactured for ornament or use, by the present savage tribes."

From AMER. MONTHLY MAG. & CRITICAL REVIEW; ed. by Biglow. v. 4, p. 67. N. Y., Nov., 1818.

''Another institution which had been established in June, 1818, and had commenced its regular meetings in July, 1819, was the WESTERN MUSEUM SOCIETY, whose principal object was to make a collection of the natural productions and antiquities of the western country. The Museum also contained a number of specimens from abroad. The price of membership was fifty dollars, which was transferable and which secured admission for the subscriber's whole family. The Museum collection was placed in the building of the Cincinnati College. 'Decent strangers were cheerfully admitted.' '' GREVE. p. 523–24. (See Bibliography below).

" . . . The Museum at that time (in 1820), owned a Cabinet with philosophical and chemical apparatus and funds exceeding $4,000 and it was regarded as especially auspicious that the newly organized Cincinnati College was given access to the property of this institution. At a later time, it will be remembered it was moved to Second and Main Streets, where under the charge of Mr Dorfeuille, it comprised specimens, including those both from the animal and mineral kingdom. At a later time it is said to have possessed specimens, including the Mammoth and Arctic elephant bones, and the bones of other animals, fossils, mineral and botanical specimens, Egyptian and American antiquities and microscopic designs over 14,000 in number. . ." GREVE. p. 903.

In 1819 and 1820, Daniel Drake delivered discourses before the Society. At its extinction in the thirties, the collections were taken over by the newly formed WESTERN ACADEMY OF NATURAL SCIENCES, CINCINNATI, (1835), q.v.

Robert Best was an active member of the Society and served as curator for a time.

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1904 GREVE, C. T. Western Museum Society. Cincinnati, 1904. (In his Centennial History of Cincinnati. v. 1, p. 523–24, 903)

Papers on Natural History

1818 SLACK, Elijah, DRAKE, Daniel, FINDLAY, James, STEELE, William, and EMBREE, Jesse. An address to the people of the western country. Written Sept. 15.

In Amer. J. Sc. (1818), v. 1, no. 2, p. 203–7. Nov. 1818.

1819 DRAKE, Daniel. An introductory lecture on the utility and pleasures of the study of mineralogy and geology, delivered in the Western Museum, December 18, 1819 . . .

In Cincinnati newspapers of the day.

1820 ———. An anniversary discourse, on the state and prospects of the Western Museum Society, delivered by appointment, in the chapel of the Cincinnati College, June 10th, 1820, on the opening of the Museum. Cincinnati, Printed for the Society by Lorker, Palmer & Reynolds, 1820. 36 p. 12°.

Appx. p. 35–6, Appeal by managers. Copy seen at New York Public Library.

AMERICAN GEOLOGICAL SOCIETY, NEW HAVEN (1819)

History

The AMERICAN GEOLOGICAL SOCIETY was organized on the sixth of September, 1819, in the philosophical room of Yale College, at New Haven. The Constitution was adopted and the first meeting held on the seventh of September. The Act of Incorporation was approved by the state of Connecticut, May 31, 1819. The officers elected were: William Maclure, president; George Gibbs, Benjamin Silliman, Parker Cleaveland, Stephen Elliott, Robert Gilmor, Jr., Samuel Brown and Robert Hare, vice-presidents; T. Dwight Porter, recording secretary; J. W. Webster, F. C. Schaeffer, and Edward Hitchcock, corresponding secretaries; A. M. Fisher, treasurer; T. D. Porter, curator.

It met quarterly, and in the MS record books of the Society, which was really the first national society of its kind in the United States, meetings are noted for Jan. 26 and Sept. 13, 1820; Dec. 4, 1820 (when A. S. Monson was elected secretary in place of Porter), Sept. 12, 1821; Dec. 3, 1821; Sept. 1822; Sept. 16, 1824; Sept. 14 and Dec. 1825; Sept. 1826. Maclure remained president throughout the period of the Society's existence.

Every state of the Union was represented by one or more members; a list of whom is given in the MS records. In addition to those noted above, some of the prominent members were: J. F. Dana, Frederick Hall, Chester Dewey, Eli Ives, Elias Cornelius, James Pierce, P. S. Townsend, De Witt Clinton, Amos Eaton, T. R. Beck, John Torrey, Lardner Vanuxem, Denison Olmsted, Thomas Cooper, J. J. Bigsby, Thomas Nuttall, Ebenezer Emmons, Samuel Robinson, George T. Bowen, Edwin James, Jacob Porter, H. R. Schoolcraft.

Announcement of the formation of the Society was made in the AMERICAN JOURNAL OF SCIENCE (1818), v. 1, p. 442. June, 1819. The Constitution and its Proceedings for 1819 are to be found in v. 2, p. 139–44. April, 1820. This Journal, edited by one of the vice-presidents of the Society, Benjamin Silliman, was the organ of publication for the papers read at intervals before the Society. See below PAPERS ON NATURAL HISTORY. See also MERRILL, (1), p. 239–40, (see Annot. Bib.) for some interesting data concerning various members of the Society.

The last meeting of the Society appears to have taken place on Sept. 18, 1826. Abstracts of the Proceedings of the Society may be found in the AMERICAN JOURNAL OF SCIENCE, as follows:

v. 2, p. 139–44, 372.	Apr. & Nov.	1820
v. 3, p. 360	May,	1821
v. 4, p. 191	Nov.	1821
v. 5, p. 403– 4	Sept.	1822
v. 8, p. 392–93	Aug.	1824
v. 9, p. 178–79	Jan.	1825
v. 10, p. 201– 2	Nov.	1825

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1826 AMERICAN GEOLOGICAL SOCIETY. Records of the . . . for 1819–26. New Haven, 1819–26. MS. Folio.

MS examined by courtesy of Mr. Andrew Keogh, librarian of the Yale University Library. Contains Act of Incorporation; Constitution; Records of the Society—minutes of meetings, members added, etc.

Papers on Natural History—All Published in the "American Journal of Science (1818)

1820 Silliman, Benjamin. Sketches of a tour in the counties of New Haven and Litchfield in Connecticut, with notices of the geology, mineralogy and scenery. . .

In v. 2, no. 2, p. 201–35. Nov. 1820.

1821 Cooper, Thomas. On volcanoes and volcanic substances with a particular reference to the origin of the rocks of the floetz trap formation. Rd Dec. 3.

In v. 4, no.2, p. 205–43. Feb. 1822. Written Nov. 1, 1821. See also Merrill, (1), p. 261–62. (see Annot. Bib.)

Dewey, Chester. Crystallized steatite, zoisite, foliated chlorite, and silico-calcareous oxyd of titanium. . . . Rd Dec. 3.

In v. 4, no.2, p. 274–77. Feb. 1822.

Schoolcraft, H. R. Remarkable fossil tree, found about fifty miles S. W. of Lake Michigan . . . in August, 1821, on the river Des Plaines in the N. E. angle of Illinois. Rd Dec. 3.

In v. 4, no. 2, p. 285–91. Feb. 1822. See also Cass Exped. to Great Lakes (1820). Also pub. as a separate. Albany, N. Y. 1822. 18 p.

1822 Olmsted, Denison. Descriptive catalogue of rocks and minerals collected in North Carolina, and forwarded to the Society. . . Written in April, 1822.

In v. 5, no. 2, p. 257–64. Sept. 1822.

Anon. Several other catalogues of rocks and minerals presented to the . . . Society.

In v. 5, no. 2, p. 265–72. Sept. 1822.

HITCHCOCK, Edward. A sketch of the geology, mineralogy, and scenery of the regions contiguous to the river Connecticut; with a geological map and drawing of organic remains, and occasional botanical notices . . . in three parts.
In v. 6, no. 1 & 2, p. 1–85, 201–36, illus. Jan. & May, 1823. & v. 7, no. 1, p. 1–30, illus. Nov. 1823. See also MERRILL, (1), p. 268–69. (See Annot. Bib.)

1824 OLMSTED, Denison. On the gold mines of North Carolina. Rd Sept. 8.
In v. 9, no. 1, p. 5–15. Jan. 1825. See also North Carolina Geol. Surv. (1823)

ROBINSON, Samuel. Rock specimens for the American Geological Society. Written July 31, 1824.
In v. 9, no. 1, p. 50–3. Jan. 1825.

1831 MATHER, W. W. Geological notices. . . 1) Illustrations of a section through a part of Connecticut, from Killingly to Haddam; 2) Notices of the geology of the Highlands of New York.
In v. 21, no. 1, p. 94–9, 1 pl. Oct. 1831.

THE LONG EXPEDITION TO THE ROCKY MOUNTAINS (1819)

History

"You will assume command of the expedition to explore the country between the Mississippi and the Rocky Mountains. You will first explore the Missouri and its principal branches, and then in succession Red River, Arkansas and Mississippi, above the mouth of the Missouri.

"The object of the expedition is to acquire as thorough and accurate knowledge as may be practicable, of a portion of our country, which is daily becoming more interesting, but which is as yet imperfectly known . . . You will enter in your journal, everything interesting in relation to soil, face of the country, water courses and productions, whether animal, vegetable or mineral.

"You will conciliate the Indians by kindness and presents, and will ascertain as far as practicable the number and character of the various tribes, with the extent of the country claimed by each . . ." EXTRACTS from the Orders of the Secretary of War, Hon. J. C. Calhoun, to Major Stephen Harriman Long, exhibiting the objects and plan of the Expedition to the Rocky Mountains carried on during 1819 and 1820. Phila. ed., 1823, pref. p. 3–4. (THWAITES ed. v. 14, p. 37–8). See Bibliography below.

James, the author of the Account of the Expedition, states further that owing to the state of the national finances of the time, considerable retrenchments in the objects of the expedition were necessary.

On March 31st, 1819, Major S. H. Long issued the following orders to his assembled staff at Pittsburgh, including instructions as to the duties and position of the various members of the personnel:

''The Commanding Officer will direct the movements and operations of the expedition, both in relation to military and scientific pursuits . . . The prime object of the expedition being a topographical description of the country to be explored, the Commanding Officer will avail himself of any assistance he may require from persons . . . In this branch of duty, Lt. Graham and Cadet Swift will officiate as his immediate assistants.

''The Journal of the Expedition will be kept by Major Biddle . . .

''Dr [William] Baldwin will act as botanist for the expedition. A description of all the products of vegetation, common or peculiar to the countries we may traverse, will be required of him . . . Will also officiate as physician and surgeon for the expedition . . .

''Mr [Thomas] Say will examine and describe any objects of zoology and its several branches, that may come under our observation; a classification of all land and water animals, insects, etc., and a particular description of the animal remains found in a concrete state will be required of him. Geology, so far as it relates to earths, minerals, and fossils, distinguishing the primitive, transition, secondary, and alluvial formations and deposits, will afford subjects of investigation for Mr [Augustus Edward] Jessup. In this science, as also in botany and zoology, facts will be required without regard to the theories or hypotheses that have been advnaced on numerous occasions by men of science. Mr T. R. Peale will officiate as assistant naturalist . . .'' S. H. LONG. p. 1–3 (of the Phila. ed.).

Edwin James, who became the author of the Account of the Expedition, joined the Expedition in 1820, replacing both A. E. Jessup and William Baldwin. The latter died prematurely, after having been with the Expedition but a few months. His Journal, although never published, may now be consulted in MS at the Library of the New York Botanical Garden (see Bibliography below). Jessup left the party after the first season in the field. Other active members of the expedition were Samuel Seymour, landscape painter, J. R. Bell, W. H. Swift.

The party left Pittsburgh, April 19, 1819, and returned to Cape Girardeau, October 12, 1820.

There were two editions of James's "Account" published in 1823, one at Philadelphia, commonly known as the Phila. ed., and the other at London, known as the London ed. In 1905, Thwaites reprinted the London edition, with such other material as was contained in the Philadelphia but not in the London ed., in his "Early western travels: 1748–1846," v. 14–17.

Between 1821 and 1826, James, Say and Torrey wrote a number of papers describing the scientific material collected on the Expedition. These are arranged in chronological order below under "Papers in Scientific Transactions." Torrey described the plants collected by James and those collected by Baldwin, who would have, had he lived, made the collections and given the descriptions himself.

For criticism of the geological aspects and achievements of the Expedition, see MERRILL, (1), p. 245–47. (See Annot. Bib.). For a resumé of the exact course and route of the Expedition, consult THWAITES, v. 14, pref. p. 9–18. (see THWAITES ed. below.)

A large number of the specimens collected were deposited in Peale's Philadelphia Museum (1784), q.v., due principally to Titian R. Peale, a member of the expedition, and son of the proprietor of the Museum, and to the efforts of Thomas Say.

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1819 BALDWIN, William. Journal of William Baldwin, botanist of the first part of the Expedition from Pittsburgh to the Rocky Mountains in 1819–20 under the command of Stephen H. Long. 1819. 149 p.

In MS at the Library of the N. Y. Bot. Garden. Baldwin died Sept. 1819.

Editions of James's Account

(1) Philadelphia ed.

1823 JAMES, Edwin. Account of an expedition from Pittsburgh to the Rocky Mountains, performed in the years 1819 and '20, by order of the Hon. J. C. Calhoun, Sec'y of War; under the command of Major Stephen H. Long, from the notes of Major Long, Mr T. Say, and other gentlemen of the exploring party; compiled by Edwin James, botanist and geologist for the expedition. Philadelphia, H. C. Carey & I. Lea, 1823. 2 v. & atlas.

v. 1 8 + 503 p.
v. 2 4 + 442 + 98 p.
Atlas. Containing 2 maps. 4.°
v. 2. appx. 98 p. contains: [GRAHAM, J. D.]
Astronomical and meteorological records; and vocabularies of Indian languages taken on the expedition for exploring the Mississippi and its western waters under command of Major S. H. Long. Phila. 1822. 98 p.
Graham's Records, p. 1–48.
Vocabularies by Thomas SAY, p. 48–88.
v. 1 Includes ch. 1–18.
v. 2 Includes ch. 1–17 & Supplementary ch. 18 & 19. containing:
LONG, S. H. General description of the country traversed by the Exploring Expedition extracted from a report by . . . ch. 18, p. 331–83.
[JESSUP, A. E.] Observations on the geology of the country traversed by the expedition . . . ch. 19, p. 384–442.
Appendix [see above—by Graham]

(2) London ed. (Repr. in Thwaites below)

JAMES, Edwin. Account of an expedition from Pittsburgh to the Rocky Mountains, performed in the years 1819, 1820, by order of the Hon. J. C. Calhoun, Secretary of War, under the command of Major S. H. Long, of the U. S. Top. Engineers; compiled from the notes of Major Long, Mr T. Say, and other gentlemen of the party, by Edwin James, botanist and geologist to the expedition . . . London, Printed for Longman, Hurst, Rees, Orme, and Brown, 1823. 3 v. illus.

THWAITES, v. 14, pref. p. 19, ftnote (see Thwaites ed. below), states that: "There are in the two editions differences in phraseology, and each contains a few paragraphs omitted from the other. . . The London edition contains a complete copy of Long's Report in place of mere extracts." Instead of the Atlas in the Phila. ed. there is in the Lond. ed. selected illustrations, including the map of the London ed. The footnotes of the Phila. ed. are gathered together in an appendix at the end of each volume of the London ed.

Contents

v. 1 7 + 344 p. illus. pl.
Includes ch. 1–12, Appx. A–C; Notes.
v. 2 356 p.
Includes ch. 1–13; Notes.
v. 3 347 p.
Includes ch. 1–11 &

LONG, S. H. A general description of the country traversed by the Exploring expedition . . . being a copy of a Report to the Hon. J. C. Calhoun. . . p. 189–267.

[Jessup, A. E.] Observations on the mineralogy and geology of a part of the United States west of the Mississippi. p. 269–330.

From his MS report.

Notes.

(3) THWAITES ed. (Repr. from London ed.)

1905 JAMES, Edwin. Account of an expedition from Pittsburgh to the Rocky Mountains, performed in the years 1819, 1820, by order of the Hon. J. C. Calhoun, Secretary of War, under the command of Maj. S. H. Long, of the U. S. Top. Engineers; compiled from the notes of Major Long, Mr T. Say, and other gentlemen of the party, by Edwin James, botanist and geologist to the expedition . . . Cleveland, The A. H. Clark Co., 1905. 4 v. (In THWAITES, R. G. ed. Early western travels: 1748–1846 . . . v. 14–17.)

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v. 14 321 p.
Contains pt. 1 of James's Account.
Preface by R. G. Thwaites.
Preliminary notice by James from the Phila. ed. (see above).
Text: ch. 1–10 of v. 1 of London ed.

v. 15 356 p.
Contains pt. 2 of James's Account.
ch. 11–12 of v. 1, & ch. 1–7 of v. 2 of the London ed. & Notes of v. 1, (London ed.) & A–G (appx.)

v. 16 [291] p.
Contains pt. 3 of James's Account.
ch. 8–13 of v. 2, & ch. 1–8 of v. 3 (of the London ed.) .

v. 17 308 p.
Contains pt. 4 of James's Account.
ch. 9–11 of v. 3 (London ed.) &
Long's Report . . . p. 61–93.
Jessup's Report . . . p. 183–254.
Graham's Meteorological Rept. (Phila. ed.) p. 256–88.
Say's Vocabularies . . . p. 289–308 (from Phila. ed.).

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1820 Jessup, A. E. Fetid fluor spar.

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1821 James, E. P. (!). Catalogue of plants collected during a journey to and from the Rocky Mountains during the summer of 1820, by E. P. James, attached to Long's Expedition.

Rd before Amer. Phil. Soc. (1769), Aug. 17, 1821. In its Trans. n. s. v. 2, no. 8, p. 172–90. 1825.

————. Remarks on the sandstone and floetz trap formations of the western part of the valley of the Mississippi. . .
Rd before Amer. Phil. Soc. (1769), Aug. 17, 1821. In its Trans. n. s. v. 2, no. 9, p. 191–215. 1825. Written from Smithland, Ky. April 21, 1821.

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Rd before Phila. Acad. Nat. Sc. (1812). In its Jour. v. 2, pt. 1, p. 149–79. Nov. & Dec. 1821.

1822 JAMES, Edwin. Geological sketches of the Mississippi Valley.
Rd before Phila. Acad. Nat. Sc. (1812), Oct. 8, 1822. In its Jour. v. 2, pt. 2, p. 326–29, map. 1822.

SAY, Thomas. Descriptions of the dipterous insects of the United States.
Rd before Phila. Acad. Nat. Sc. (1812), Dec. 24, 1822. In its Jour. v. 3, pt. 1, p. 9–54, 73–104. 1823.
Also in Repr. of Say's Entomological Writings. Phila. 1859 & 1891. v. 2, p. 38–66; 67–88.

1823 JAMES, Edwin. On the identity of the supposed pumice of the Missouri, with a variety of Amygdaloid found near the Rocky Mountains.
Rd before N. Y. Lyc. Nat. Hist. (1817), April 14, 1823. In its Annals. v. 1, pt. 1, p. 21–3. 1824.

SAY, Thomas. Descriptions of insects belonging to the order Neuroptera, Lin. Latr., collected by the expedition authorized by J. C. Calhoun, Sec. of War, under command of S. H. Long.
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TORREY, John. Descriptions of some new or rare plants from the Rocky Mountains collected in July 1820 by Dr. Edwin James.
Rd before N. Y. Lyc. Nat. Hist. (1817), Sept. 22, 1823. In its Annals. v. 1, pt. 1, p. 30–6. 1824.

SAY, Thomas. Descriptions of coleopterous insects collected in the late expedition to the Rocky Mountains . . . under command of Major Long.
Rd before Phila. Acad. Nat. Sc. (1812), Oct. 22, 1823. In its Jour. v. 3, pt. 1 & 2, p. 139–216, 238–82, 298–331, 403–62. 1823–24. & cont. in v. 4, pt. 1, p. 83–99. 1824. Also in Repr. of Say's Entomological Writings. Phila. 1859 & 1891. v. 2, p. 89–138; 139–66; 167–86; 187–224; 225–36.

1824 TORREY, John. Description of some new grasses, collected by E. James . . . during Maj. Long's Expedition to the Rocky Mountains in 1819–20.
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SAY, Thomas. Descriptions of new hemipterous insects collected in the Rocky Mountain Expedition.
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1826 TORREY, John. Some account of a collection of plants made during a journey to and from the Rocky Mountains in the summer of 1820 made by E. P. (!) James.
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CASS EXPEDITION TO THE GREAT LAKES (1820)

History

In a letter dated Detroit, November 18, 1819, Gov. Lewis Cass, of Michigan, submitted to the then Secretary of War, John C. Calhoun, a memoir suggesting an expedition "to the sources of the Mississippi River."

Gov. Cass wrote:

"The country upon the southern shore of Lake Superior and upon the water communication between that lake and the Mississippi, has been but little explored, and its natural features are imperfectly known. We have no correct topographical delineation of it, and the little information we possess relating to it, has been derived from the reports of the Indian traders.

"It has occurred to me that a tour through that country, with a view to examine the productions of its animal, vegetable and mineral kingdoms, to explore its facilities for water communication, to delineate its natural objects . . . would not be uninteresting in itself, nor useless to the government . . . The route which I propose to take, is from here to Michilimackinac, and from thence, by the straits of St. Mary's, to the river which contains the body of copper ore (specimens of which have been transmitted to the government), and to the extremity of Lake Superior . . . From that point up the river which forms the water communication between that lake and the Mississippi, to the latter river, and by way of Prairie du Chien and Green Bay to Lake Michigan . . ." SCHOOLCRAFT, p. 27–8. 1855. (see Bibliography below, 1855 ed. of Report.)

On p. 30, Gov. Cass continues: "I am not competent to speculate upon the natural history of the country through which we may pass . . . Should this object be deemed important, I request that some person acquainted with zoology, botany, and mineralogy, may be sent to join me."

The Secretary approved of the suggested expedition in his reply of January 14, 1820. In his letter of Feb. 25, 1820, he appointed Henry Rowe Schoolcraft to the position of geologist and mineralogist of the expedition.

Subsequently he appointed, in a letter dated April 5, 1820, Captain D. B. Douglass, professor of engineering at West Point, as assistant scientist to the expedition. Douglass was ordered to join the party at once. He acted chiefly as the botanist of the expedition.

In addition to the official reports rendered to the Secretary of War by Gov. Cass, Schoolcraft and Douglass, Schoolcraft published a Narrative in 1822, and a more complete one in 1855. (See BIBLIOGRAPHY, below). A number of the scientific papers were published either in the scientific transactions of some of the scientific societies or in the scientific journals. (See Papers on Natural History in Scientific Journals & Transactions, below).

A notice of the Expedition appeared in the American Journal of Science, v. 2, p. 178. April, 1820.

Schoolcraft left New York City March 5, 1820, and reached Detroit early in May. The expedition started away from Detroit on the 24th of May, 1820, and returned to Detroit Sept. 23, 1820, although Gov. Cass arrived somewhat earlier, Sept. 10, 1820.

In his "Narrative" published in 1821, he gives a chronological record of the activities of the party, but does not adhere to this method in his 1855 reprint. I have given an analysis of the contents of the chapters of the 1821 Narrative and an exact idea of the precise route followed.

The 1855 "Summary Narrative" also contains a reprint of all the official documents concerning the expedition; and also a reprint of Schoolcraft's Expedition to Itasca Lake (1832), q.v.

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(A) Schoolcraft's Narrative, 1821

1821 SCHOOLCRAFT, Henry R[owe]. Narrative-journal of travels through the northwestern regions of the United States extending from Detroit through the great chain of American lakes to the sources of the Mississippi River . . . performed as a member of the expedition under Gov. Cass, in the year 1820 . . . Albany, E. & E. Hosford, 1821. 419 + 4 p. 8 pl. map.

Rev. in North Amer. Rev. v. 15, p. 224–50. 1822. See also MERRILL, (1), p. 240–45. (See Annot. Bibliog.)

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(B) Schoolcraft's Summary Narrative, 1855

1855 SCHOOLCRAFT, H[enry] R[owe]. Summary narrative of an exploratory expedition to the sources of the Mississippi River, in 1820; resumed and completed by the discovery of its origin in Itasca Lake in 1832; by authority of the United States with appendices comprising the original report on the copper mines of Lake Superior, and observations on the geology of the Lake Basin and the summit of the Mississippi; together with all the official reports and scientific papers of both expeditions. Phila. Lippincott, Grambo & co., 1855. 596 p.

The CASS EXPED, (1820), is treated in the following pages: Pref. p. 15–8, 20; & p. 17–220, 275–447, (appx. 1).

Contents:

p. 17– 23 Introduction.
p. 25– 36 Preliminary documents of the expedition.
p. 37–220 Narrative of the Expedition (in 20 chapters).
Text entirely rewritten, with that of 1821 as a basis.

Appendix

p. 279– 86 no. 1–5. Official reports of the expedition.
p. 292–418 no. 6–18 Scientific papers (see next entries).

Scientific Contents
Schoolcraft, 1855 ed.

In APPX. 1

no. 6 SCHOOLCRAFT, H. R. Report on the copper mines of Lake Superior. p. 292–302.
Written Nov. 6. 1820.

no. 7 ————. Observations on the geology and mineralogy of the region embracing the sources of the Mississippi River, and the Great Lake basin, during the expedition of 1820 . . . p. 303–62.

Written April 2, 1822.

no. 8 ————. A report to the Senate of the United States, in answer to a resolution passed by this body, respecting the value and extent of the minerals lands on Lake Superior. p. 362–73.

Written Oct. 1, 1822.

no. 9 ————. Rapid glances at the geology of western New York, west of the Rome Summit, in 1820. p. 381–96.

no. 10 ————. A memoir on the geological position of a fossil tree in the series of the Secondary rocks of the Illinois. p. 396–408.

Also appeared as a separate. Albany, E. & E. Hosford, 1822. 18 p.

no. 11 ————. Botany. p. 408.

See Torrey below in papers in Society Trans. & Jour.

no. 12 ————. Zoology. p. 408–9.

————. A letter embracing notices of the zoology of the Northwest. p. 409–15.

Written Oct. 27, 1820.

no. 13 Barnes, D. H. Species of bivalves collected by Mr Schoolcraft and Capt. Douglass . . . p. 415–16.

See Barnes below.

no. 14 Lea, Isaac. Fresh water shells collected by Mr Schoolcraft in the valleys of the Fox and Wisconsin Rivers. p. 416.

See Lea below.

no. 15 Mitchill, S. L. Summary remarks respecting the zoology of the Northwest, by the expedition in 1820 . . . p. 416–17.

no. 16 ————. Mus Bursarius. p. 417.

See Mitchill below.

no. 17 ————. Scirurus tredecim striatus. p. 418.

See Mitchill, below, in Med. Repos.

no. 18 ————. Proteus of the lakes. p. 418.

See Mitchill below.

Papers in Society Transactions and Journals

1820 Douglass, D. B. New locality of crystallized sulphat of barytes . . .

In Amer. J. Sc. (1818), v. 2, no. 2, p. 241. Nov. 1820.

1821 Schoolcraft, H. R. Account of the native copper on the southern shore of Lake Superior, with historical citations . . . in a Report to the Department of War.

In Amer. J. Sc. (1818), v. 3, no. 2, art. 1, p. 201–16. June, 1821.
See above in the 1855 ed. of his Narrative. appx. 1, no. 6.

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In Amer. J. Sc. (1818), v. 4, no. 1, art. 6, p. 56–69. Nov. 1821. Written Aug. 21–22, 1821.

Mitchill, S. L. The proteus of the North American lakes . . .
Rd before N. Y. Lyc. Nat. Hist. (1817), Oct. 8, 1821, but appeared in the Amer. J. Sc. (1818), v. 4, no. 1, art. 23, p. 181–83. Nov. 1821.

————. Detection of a mistake into which naturalists have been led, in relation to the Mus bursarius, or pouched rat of Canada.
Rd before N. Y. Lyc. Nat. Hist. (1817), Oct. 8, 1821, but appeared in the Amer. J. Sc. (1818), v. 4, no. 1, art. 24, p. 183–85. Nov. 1821.

————. Description of two mammiferous animals of North America, the federation squirrel and the pouched rat of North America.
Rd before N. Y. Lyc. Nat. Hist. (1817), in 1820 but appeared in the Med. Repos. (1797), v. 21, no. 2, p. 248–50. Jan. 1821.

De Kay, J. E. . . . Ophisaurus, from the borders of Lake Michigan.
In Amer. J. Sc. (1818), v. 6, no. 2, p. 363. May, 1823. (Abstract.) Rd before N. Y. Lyc. Nat. Hist. (1817), in 1821.

1823 Barnes, D. H. On the genera Unio and Alasmodonta, with introductory remarks.
Rd before the N. Y. Lyc. Nat. Hist. (1817), in 1822 but appeared in the Amer. J. Sc. (1818), v. 6, no. 1, art. 6, p. 107–27, 8 pl. & in v. 6, no. 2, art. 8, p. 258–80, 3 pl. Jan. & Apr. 1823.

Schoolcraft, H. R. . . . Letter containing observations of himself . . . and others during the Exploring Expedition to the N. West . . .
In Amer. J. Sc. (1818), v. 6, no. 2, p. 362. May, 1823 (Abstract), Originally rd before N. Y. Lyc. Nat. Hist. (1817), in 1820.

1832 Lea, Isaac. . . . Unio Schoolcraftensis . . .
Rd before Amer. Phil. Soc. (1769), Mar. 16, 1832. In its Trans. n. s. v. 5, art. 2, p. 37–8. 1837.

CATSKILL LYCEUM OF NATURAL HISTORY, CATSKILL, NEW YORK (1820)

History

"The attention of the well informed residents of Catskill, New York, has been of late excited to the study of mineralogy, botany, chemistry, and agriculture, and they have recently organized a scientific institution under the name of the Catskill Lyceum of Natural History, composed of between twenty and thirty resident members, and as many corresponding members. The corresponding members are worthy of the learned professions, resident in the nearby counties and elected at their own solicitation. I think that in time, the Catskill Lyceum will become a numerous and efficient society, well calculated to disclose the resources of the region in which it is located . . .'' Extract from a letter to Benjamin Silliman, by the president of the Lyceum, James PIERCE. In Amer. J. Sc. v. 3, no. 2, p. 237–38. June, 1821.

In 1826, S. E. Dwight notes the continued existence of the Lyceum in the Amer. J. Sc. v. 10, p. 372. Feb. 1826. Some of the Proceedings of the Society are noted in the Amer. J. Sc. v. 5, no. 2, p. 405. Sept. 1822.

The lectures given at that period by Amos Eaton in most of the cities along the Hudson was undoubtedly instrumental in the formation of the Lyceum.

Papers on Natural History

1821 DWIGHT, B. W. An account of a remarkable storm, which occurred at Catskill, July 26, 1819 . . .
In Amer. J. Sc. (1818), v. 4, no. 1, art. 12, p. 124–42. Nov. 1821.

1822 PIERCE, James. Geology, mineralogy, scenery, etc., of the Highlands of New York and New Jersey.
In Amer. J. Sc. (1818), v. 5, no. 1, p. 26–33. June, 1822. Also rd before N. Y. Lyc. Nat. Hist. (1817).

1823 ———. A memoir on the Catskill Mountains, with notices of their topography, scenery, mineralogy, zoology, economical resources, etc.
In Amer. J. Sc. (1818), v. 6, no. 1, p. 86–97. Jan. 1823.

DELAWARE COUNTY CHEMICAL AND GEOLOGICAL SOCIETY, DELHI, NEW YORK (1821)

History

''An association by this name was organized at Dehli in the month of August, 1821. It is composed of between forty and fifty well-informed and respectable inhabitants of the county of Delaware, New York. The object of the Association is the improvement in literature and science, but more particularly in chemistry, geology, and mineralogy . . . They have collected a cabinet of minerals, and intend to procure a library and a chemical laboratory; at each quarterly meeting an original scientific discourse is delivered, essays read . . .'' From the Amer. Jour. Sc. v. 5, no. 1, p. 198. May, 1822.

Its president was Charles A. Foote, and its vice-president was James Clark. The organization proved a short-lived one. A brief account by H. C. Bolton in his ''Early American Chemical Societies'' of this organization may be found in the Pop. Sc. Mthly. v. 51, p. 825. Oct. 1897.

FRANKLIN SOCIETY FOR THE PURPOSE OF PROMOTING INVESTIGATION IN NATURAL SCIENCE, PROVIDENCE, R. I. (1821) (THE PROVIDENCE FRANKLIN SOCIETY)

History

This Society, commonly known as the PROVIDENCE FRANKLIN SOCIETY, ''whose object is the pursuit and cultivation of the different branches of science, was established in 1821, and it consists at the present time, of between forty and fifty members. Its meetings are held once a week . . . A cabinet consisting of mineralogical and chronological specimens, with a variety of curiosities natural and artificial, has been formed, and is progressively augmenting.'' From the AMER. J. SC. v. 18, no. 1, p. 195–96. Apr. 1830.

The Society was incorporated by an Act of the General Assembly, January 28, 1823, after its organization in 1821, under the title of PHILOSOPHICAL ASSOCIATION. Its founders and earliest members were W. T. Grinnell, Joseph Balch, Jr., Daniel S. Lawrence, Charles Hadwin, Stanford Newell, Owen Mason and Zachariah Allen.

''In the earlier days of the Society, it directed its attention largely to chemical science, gradually enlarging the scope of its work, until it comprehended natural history in its various branches. Lectures and experiments were prominent in its early work. In 1828, the new Hall on South Main Street was occupied, and about that time the Museum was begun by a donation of minerals from W. T. Grinnell. From this time for a number of years the increase of the Cabinet was rapid, the donations including valuable specimens, illustrative of mineralogy, geology, conchology, ornithology and other branches.''

Its presidents were:

1821–36	William T. Grinnell.
1836–40	Owen Masson.
1840–43	John Kingsbury.
1843–45	Moses B. Lockwood.
1845–50	Thomas M. Burgess.
1850–52	George Baker.
1852–54	George L. Collins.
1854–55	J. W. C. Ely.
1855–59	Charles W. Parsons.
1859–69	Stephen T. Olney.

The above extracts are taken from GREENE, p. 211–12 (see Bibliography, below).

In 1831 the Society purchased the fine mineral collection of Dr Samuel Robinson (one of the leading mineralogists of the day) —noted in Amer. J. Sc. v. 20, p. 415. July, 1831.

For a number of years it had no publication of its own, but some of its members, notably George Thurber, Owen Mason and T. W. Webb submitted papers to the American Journal of Science (1818), q.v., the leading scientific journal of the period. In 1845, the Society published a ‘‘Catalogue of plants . . .’’, (see PAPERS below), and issued its first volume of Proceedings (in 2 no.).

The Society gave very active support to Jackson's Survey of Rhode Island in 1839 (see R. I. Geol. Surv. (1839)).

In the forties, its botanical activities were chiefly due to the work of S. T. Olney, George Hunt, George Thurber, and H. B. Metcalf, which resulted in the ‘‘Rhode Island plants’’ (see PAPERS, 1845, below).

Bibliography

1823 PROVIDENCE FRANKLIN SOCIETY. Charter and by-laws. . . . [Providence], January, 1823. [12 p.]
Another ed. May 5, 1857; & one, 1878. 22 p.

1845 PROVIDENCE FRANKLIN SOCIETY. Proceedings . . . Providence, The Society, 1845. v. 1. 42 p.
Appeared in 2 numbers (See Olney, below).

1880 BROWN, Welcome O. An historical address . . . on the occasion of opening the new rooms of the Society in Arnold Block. Providence, R. I., 1880. 50 p.

1886 GREENE, Welcome Arnold, and others. The Providence Franklin Society. Providence, 1886. (In their Providence plantations for two hundred and fifty years. p. 211–12.)

1887 PROVIDENCE FRANKLIN SOCIETY. Report on the Geology of Rhode Island. Providence, 1887. 130 p. 3 pl.

Contains: "INDEX of publications bearing upon the geology and mineralogy of Rhode Island, chronologically arranged". p. 2–57. (Well annotated)

Papers on Natural History

1829 FRANKLIN SOCIETY OF PROVIDENCE. General directions for collecting and preserving articles in the various departments of natural history; respectfully submitted by the Franklin Society of Providence, R. I., to the attention of travellers, sea-faring men, and all lovers of nature and of nature's handy works, who are willing to lend their aid in promoting the cause of science, and advancing the progress of the arts. Providence, J. C. Parmenter, printer, 1829. 8 p.

Copy examined is in N. Y. Public Library.

1845 OLNEY, S. T. Catalogue of plants collected by the botanical department of the Providence Franklin Society, principally in Rhode Island, in 1844. Providence, Knowles & Vose, 1845. 8 p.

———. Rhode Island plants; or, Additions and emendations to the Catalogue of plants published by the Providence Franklin Society in 1845. Proc. v. 1, no. 1 & 2, p. 1–24, 25–42.

Species enumerated, no. 738–1201.

Copies of both examined in Brown Univ. Library.

AMHERST COLLEGE NATURAL HISTORY SOCIETY AND CABINETS, AMHERST, MASS. (1822)

The first natural history society to be founded at Amherst College was known as the LINNAEAN SOCIETY, and was organized in the year 1822, with George Shephard, Charles Upham Shephard, Abel Packard, George White, Andrew H. Reed and Frederic A. Willard as its most active members. (See Bibliography, below: 1871: CUTTING, p. 56–7.)

"When I came here, in 1826, a natural history society existed among the students, which had begun to bring together specimens, chiefly in mineralogy, geology and mammalogy, but they were too few to be employed in lecturing. I therefore took up the business of collecting. I had, however, in previous years, obtained a few hundred specimens, mostly in mineralogy and geology and the trustees in 1826 'voted that Prof. Hitchcock be requested to deposit his private geological cabinet in the Cabinet of the College.' Previous to this time, I believe, the Natural History Society had presented the whole or a part of their collections, so that as far as numbers were concerned our cases looked quite respectable . . .

"But to one acquainted with natural history, probably the larger part would come under the ironical title of Jactalites, that is, specimens to be thrown away. However they did a very good service and so long as better collections were not near. And it is a fact that some of the ablest naturalists who have graduated here (ex., Shephard and Adams), started in these days of meagre scientific illustration . . ." HITCHCOCK, Edward. Reminiscences. . . . 1863 (see Bibliography, below).

Edward Hitchcock was appointed professor of natural history at Amherst in 1825 and remained in that office until 1855, when he became president of the College. He was primarily responsible for much of the natural history activity at the college and the building up of the various natural history cabinets.

On Aug. 26, 1831, some time after the expiration of the Linnaean Society, noted above, a new organization known as the "N. L. D.," a secret society, was formed whose object was the pursuit of natural history studies. "The Proceedings of the Society were secret during its whole history; its meetings were held monthly —afterwards fortnightly . . . Students to the number of eight were elected from each class . . . The N. L. D. was dissolved Oct. 4, 1848, when its Library and Cabinets were turned over to the College" (From CUTTING, 1871, p. 57–9).

The records of the Society and some of the catalogues of its collections are in the Converse Memorial Library at Amherst College, and were examined by courtesy of Mr J. S. Fletcher, the Librarian of Amherst. The MS are noted below in the Bibliography.

The organization members of the Society were S. T. Allen, Nathan Belcher, John A. Burnham, Chauncey A. Hall, Benjamin Haskell, J. F. Houston and Simeon Shurtleff. On Nov. 27, 1832, C. B. Adams, the well-known conchologist, state geological surveyor of Vermont, and professor of natural history at Amherst was admitted to the ranks of the Society.

The Society was subsequently known as the Phi Beta Theta. Its presidents at various periods were John F. Houston, in 1832; W. O. Collins, in 1833; John Bulkley, G. P. Smith, and C. B. Adams, in 1833; C. Clarke, in 1834; W. B. Bond, in 1835. Reviews of books, analyses of the contents of the current scientific journals comprised the chief activities of the members of the Society.

The MASSACHUSETTS GEOLOGICAL SURVEY (1830), q.v., conducted by Prof. Hitchcock netted the Amherst College Cabinets many hundreds of specimens during the life of the Survey. The Ichnological Cabinet was begun in 1835. "For as soon as I had turned my attention to Ichnology, I commenced the accumulation of specimens, and from that day to this (1863), I have never ceased to gather in all which I could honestly obtain . . ." HITCHCOCK. 1863, p. 81.

In 1853, he purchased a large number of specimens from the auction sale of the famous Dexter Marsh collection of fossil footprints, etc., of the Connecticut Valley.

The Zoological Cabinet was founded in 1839 with the legacy of 1,000 species of shells and corals belonging to Prof. Hovey. About the same time the Botanical Cabinet was established on a permanent foundation. The great collection of meteorites collected by C. U. Shephard was donated to the College Cabinet of Mineralogy. In 1850 and 1851, Prof. C. B. Adams made large collections of shells at Panama and the West Indies, which were presented to the Amherst College Cabinet.

The extracts and information given above are taken from Hitchcock's "Reminiscences" published in 1863, of which p. 74–115, are primarily concerned with his scientific activities.

Below are given the various publications relating to the natural history activities at the College under BIBLIOGRAPHY AND PUBLICATIONS.

An account of the new building erected at Amherst for the housing of the Cabinets may be found in the American Journal of Science, v. 56 (ser. 2, v. 6), p. 293. Sept. 1848.

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1829 HITCHCOCK, Edward. A catalogue of plants growing without cultivation in the vicinity of Amherst College . . . published by the Junior class of that institution. Amherst, J. S. & C. Adams & co., printers, 1829. 64 p.

Rev. in Amer. J. Sc. v. 17; p. 199–200. Jan. 1830.

1833 ADAMS, Charles Baker, and WRIGHT, John H. A catalogue of simple minerals in the Cabinet of the N. L. D. Society . . . the Belcher and the Society Cabinets. Amherst, 1833. 193 p.

In MS in the Amherst College Library.

This and the other MS records noted below were examined by courtesy of R. S. Fletcher, librarian of Amherst.

1836 ADAMS, Charles Baker. A catalogue of simple minerals in the Cabinet of the N. L. D. Society . . . Amherst, Jan. 30, 1836. 152 p.

In MS in the Amherst College Library.

HOUSTON, John Frederick. Album: records, history, meetings, members, constitution . . . of the N. L. D. Society . . . Amherst, 1836. 2 v.

In MS in the Amherst College Library.

ANON. Catalogue of the shells and library . . . Amherst, 1836.

In MS in the Amherst College Library.

1852 ADAMS, Charles Baker. Catalogue of shells collected at Panama with notes on synonymy, station and habitat . . . (collected for the College Cabinet).

Rd before N. Y. Lyc. Nat. Hist. (1817), in 1852.

In its Annals. v. 5, p. 229–549. June–July, 1852.

1861 SHEPHARD, C. U. Catalogue of the meteoric collection of . . . deposited in the Cabinet of Amherst College . . .

In Amer. J. Sc. (1818), v. 81 (ser. 2, v. 31), p. 456–59. May, 1861.

1862 HITCHCOCK, Charles Henry. The visitor's guide to the public rooms and cabinets of Amherst College; with a preliminary report. Amherst, 1862. 112 p.

1863 HITCHCOCK, Edward. Reminiscences of Amherst College, historical, scientific, biographical and autobiographical; also of other and wider life experiences. Northampton, Mass., Bridgman & Childs, 1863. 7 + 412 p. 4 pl. map.

List of his publications, p. 378–91.

1871 CUTTING, George R. Student life at Amherst College. Amherst, Mass., 1871. 204 p.

p. 56–7, the Linnaean Society; p. 57–9, the N. L. D. Society.

MARYLAND ACADEMY OF SCIENCE AND LITERATURE, BALTIMORE (1822)

History

"After several previous unsuccessful attempts to organize in the city of Baltimore, an association for the promotion of science, in the year 1819, a few gentlemen formed a Society, which met in a humble room over a stable . . . Notwithstanding the zeal of its members, the Society was very short-lived. Its funds were, however, carefully husbanded; and subsequently amounted to over $1,200, when they were given to the Academy which was formed in 1822. This was the first successful attempt to establish a scientific institution.

''Dr H. L. Girardin was its first president. On February 16, 1826, the members were incorporated under the name of MARYLAND ACADEMY OF SCIENCE AND LITERATURE . . . The collections were greatly increased, a valuable museum was formed, and the members were zealous and active till the year 1834, when the building and with it the greater part of the library and collections were destroyed by fire. In 1836, the Academy was again revived with Dr Patrick Macaulay as its president.

''In 1837, its first and only volume of Transactions was issued. After a short and languishing existence of about eight years, the Academy was dissolved in 1844, and its books and collections were distributed among its members. After 1844, unless we except the Geological and Phrenological Societies, nothing was attempted in Baltimore for the cultivation of science.

''On May 7, 1855, the Maryland Historical Society established 'A committee on natural history,' consisting of P. T. Tyson, J. G. Morris, etc. . . . The committee met every fortnight until the close of 1862 . . .

''On January 22, 1863, a meeting was held at the house of Philip T. Tyson and the present Academy was organized by the adoption of a Constitution. Tyson was elected its president. In 1867, it was called the MARYLAND ACADEMY OF SCIENCE, 'the object of which shall be to promote scientific research and to collect, preserve and diffuse information relating to the sciences, especially those which are connected with the natural history of Maryland.''' WEEKS, S. B. Rept. U. S. Commissioner Education for 1893–94. v. 2, p. 1521–22.

An account of the condition of the Academy, after the fire of 1834, may be found in the Amer. J. Sc. v. 30, p. 192–94. Apr. 1836. Abstracts of its Proceedings for 1836 and 1837 may be found in the same journal, v. 30, p. 395–98. July, 1836, and v. 31, p. 395–99, Jan. 1837. Macaulay was elected president Feb. 29, 1836. Further proceedings are noted in Amer. J. Sc. v. 32, p. 204–7, April, 1837.

E. Geddings and P. T. Tyson were the vice-presidents. In 1837, J. T. Ducatel was elected president, with Tyson and R. Eglesfield Griffith, vice-presidents. The curators for 1836 were A. B. Cleaveland, George W. Andrews, George Frick, and James Green.

For 1837, the curators of the Academy were John H. Alexander, William Edward Coale, William Riley and James Green.

Sections 3, 4, and 5 of the Academy were devoted to mineralogy and geology; zoology; botany and vegetable physiology, respectively. The chairman of section 3, was P. T. Tyson; of section 4, was R. E. Griffith; and of section 5, W. E. A. Aikin.

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1837 MARYLAND ACADEMY OF SCIENCE AND LITERATURE, BALTIMORE. Transactions. . . . Baltimore, Printed by John D. Toy, 1837. v. 1, pt. 1 (190 p.). map. sect.

History of formation of Society, members, etc., p. 1–12. Transactions and proceedings for 1836–37, p. 159–74. Papers on natural history, etc., p. 13–158.

1888 UHLER, P[hilip] R[eese]. Sketch of the history of the Maryland Academy of Science. Baltimore, Dec. 19, 1888. (In Maryland Acad. Sc. Trans. v. 1, p. 1–10)

1894 WEEKS, Stephen B[eauregard]. History of scientific institutions in Baltimore. Washington, 1894. (In U.S. Commissioner Education. Rept. 1893–94. v. 2, p. 1521–22)

Transactions (T)

v. 1, pt. 1, 1837, 190 p. map sect.

Papers on Natural History

1837 TYSON, P. T. A description of the Frostburg coal formation of Alleghany County, Maryland, with an account of its geological position. T. v. 1, art. 4, p. 92–8, sect. Rd Feb. 9.

DUCATEL, J. T. Outlines of the physical geography of Maryland, embracing its prominent geological features. T. v. 1, art. 2, p. 24–54, map. Rd Feb. 16 & Mar. 3.

See also Maryland Geol. Surv. (1833).

TYSON, P. T. A descriptive catalogue of the principal minerals of the state of Maryland. T. v. 1, art. 6, p. 102–17. Rd Mar. 9.

AIKIN, W. E. A. Catalogue of phaenogamous plants and ferns, native or naturalized, growing in the vicinity of Baltimore, Maryland. T. v. 1, art. 3, p. 55–91. Rd Mar. 16.

Assisted by E. GEDDINGS & J. T. DUCATEL.

THE SOCIETY. Directions for preparing specimens of natural history . . . T. v. 1, art. 10, p. 148–56.

NEW YORK MEDICAL AND PHYSICAL JOURNAL (1822)

History

The NEW YORK MEDICAL AND PHYSICAL JOURNAL was begun in March, 1822, as a quarterly, under the editorship of Messrs J. W. Francis, Jacob Dyckman, and J. B. Beck. Of the first series, 7 volumes between 1822 and 1828 were published. A second series of two volumes, appeared in 1829–30.

Its chief contributions to natural history were due primarily to Dr. Francis' wide acquaintance with the naturalists of the day.

Bibliography

1822 (The) NEW-YORK MEDICAL AND PHYSICAL JOURNAL; ed. by J. W. Francis, Jacob Dyckman, and John B. Beck. New York, Pub. by E. Bliss & E. White, 1822–28. 7 v.

Series 2. 1829–30. 2 v.
Dyckman's named dropped with v. 2.;
John Bell & D. L. Peixotto added with v. 4;
Francis' dropped with v. 5;
Bell's dropped with v. 6.

Papers on Natural History

1822 **v. 1, no. 1, March.**

Torrey, John. Description and analysis of Gibbsite, a new mineral. art. 8, p. 68–73.

Rd before N. Y. Lyc. Nat. Hist. (1817), Mar. 18, 1822.

v. 1, no. 2, June.

Clinton, De Witt. Account of the Salmo Otsego, or the Otsego basse . . . art. 11, p. 188–90.

Torrey, John. Description and analysis of a new ore of zinc . . . art. 12, p. 191–94.

Rd before N. Y. Lyc. Nat. Hist. (1817), Apr. 1822. Also in Amer. J. Sc. (1818), v. 5, no. 2, p. 235–38. Sept. 1822.

Nuttall, Thomas. Observations and geological remarks on the minerals of Paterson and the Valley of the Sparta in New Jersey. art. 13, p. 194–204.

Also in Amer. J. Sc. (1818), v. 5, no. 2, p. 239–48. Sept. 1822.

v. 1, no. 4, December.

Mitchill, S. L. Notice of some of the things received into my museum and library . . . p. 510–13.

1823 **v. 2, no. 1, March.**

Ludlow, E. G. A statistical and medical account of the Genesee county, in the State of N. Y. art. 7, p. 65–105.

Topography, p. 65–70.

BECK, L. C., and TRACEY, J. G. Description of a new species of Ranunculus, with remarks. art. 9, p. 112–16.
Rd before Albany Lyc. Nat. Hist. (1823), in 1823.

*FINCH, John. Observations on what are termed the alluvial formations in the United States. art. 11, p. 116–20.

HADLEY, James. Notice of alum slate, sulphuret of zinc, anthracite and limpid quartz. p. 132–33.

v. 2, no. 2, June.

CLINTON, De Witt. Remarks on the Columbia migratoria, or passenger pigeon. art. 10, p. 210–15.
Also in Western Quart. Reporter Med. Surg. & Nat. Sc. (1822), v. 2, p. 166–71. July, 1823.

v. 2, no. 3, September.

MITCHILL, S. L. A methodical enumeration of the principal parasitical animals . . . art. 7, p. 336–59.
Rd before N. Y. Lyc. Nat. Hist. (1817), April 21, 1823.

1824 **v. 3, no. 1, March.**

HAYES, P. An account of the inflammable springs in Ontario County, New York . . . art. 6, p. 49–54.

v. 3, no. 2, June.

MITCHILL, S. L. Observations and facts concerning the Siren lacertina of Georgia and Carolina . . . art. 7, p. 184–98, 1 pl.
Rd before Lit. & Philos. Soc. N. Y. (1814), May 13, 1824.

1825 **v. 4, no. 1 & 2, Mar. & June.**

TOWNSEND, P. S. An account of the topography, weather and diseases of Nassau, Island of New Providence . . . West Indies . . . no. 1, art. 4, p. 68–78; no. 2 p. 185–204.

1826 **v. 5, no. 2, June.**

BECK, L. C. An account of the salt springs at Salina, Onondaga County, N. Y., with a chemical examination of the water and of several varieties of salt manufactured at Salina and Syracuse. art. 3, p. 176–99.
Rd before Albany Inst. (1824), April 27, 1825.

THE WESTERN QUARTERLY REPORTER OF MEDICAL, SURGICAL AND NATURAL SCIENCE, CINCINNATI (1822)

History

The Western Quarterly Reporter of Medical, Surgical and Natural Science was founded and edited by John D. Godman, at Cincinnati early in 1822. It was the first active attempt to found a strictly scientific journal west of the Alleghanies. Only two volumes were ever published. There were four numbers to the first volume, but only two of the second.

"It is most particularly our wish to give descriptions of this great region, which may be relied on as accurate. To gather from various sources, all the facts that can be ascertained in relation to peculiarities of climate, of soil and productions . . ." Preface, p. 7, of v. 1. 1822.

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1822 (The) WESTERN QUARTERLY REPORTER OF MEDICAL, SURGICAL AND NATURAL SCIENCE; supported by physicians and naturalists of the Western country; edited by John D. Godman. Cincinnati, Pub. by J. P. Foote, 1822–23. 2 v.

Volumes examined are those in the Library of the N. Y. Academy of Medicine.

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1822 **v. 1, no. 2 [May].**

Foote, J. P. Observations on the study of natural history. art. 6, 148–53.

Flint, James. Geology of the Falls of the Ohio. art. 7, p. 153–64.

v. 1, no. 3, [August].

Dorfeuille, J. Tabular view of a system of entomology. p. 342, fold. tab.

v. 1, no. 4, [November].

————. On an insect plant. p. 398–400.

1823 **v. 2, no. 1, [February].**

Say, Thomas. A description of some new species of hymenopterous insects. art 9, p. 71–82.

Also in Repr. of Say's Entomological Writings. Phila. 1859 & 1891. v. 1, p. 161–69.

v. 2, no. 2, [July].

————. Descriptions of insects belonging to the order Neuroptera Lin. Latr. collected by the expedition authorized by J. C. Calhoun, Sec. of War, under the command of S. H. Long. art. 4, p. 160–65.

See also Long. Exped. to Rockies (1819). Also in Repr. Say's Ent. Writings. 1859 & 1891. v. 1, p. 170–75.

Clinton, De Witt. Remarks on the Columbia migratoria, or passenger pigeon. art. 5, p. 166–71.

Also in N. Y. Med. & Phys. Jour. (1822), v. 2, p. 210–15. June, 1823.

ALBANY LYCEUM OF NATURAL HISTORY (1823)

History

''The Albany Lyceum of Natural History was formed on March 1, 1823, and incorporated April 23, 1823, 'for the promotion of the objects mentioned in its title,' under the presidency of Stephen Van Rensselaer. Confining its labors to the advancement and extension of the knowledge of the natural sciences, and more particularly of the natural productions of our own state, it succeeded in forming a Museum, embracing respectable collections in the various branches, especially mineralogy, geology, and oryctology.

''Circumstances, on which it is not necessary to dwell, induced a majority of the members of both Societies (The Lyceum and the Society for the Promotion of Useful Arts (1804), q. v.), to believe that the objects for which they had been incorporated, would be more certain by a union of . . . '' From Albany Inst. Trans. v. 1, pt. 2, appx. p. 25. 1830.

On May 5, 1824, the Albany Lyceum of Natural History and the Society for the Promotion of Useful Arts (1804), were merged to form the Albany Institute (1824), q.v. The Lyceum became the natural history section of the Institute.

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1830 ALBANY LYCEUM OF NATURAL HISTORY. Charter . . . (In Albany Inst. Trans. v. 1, pt. 2, appx. p. 3–4. 1830).

ALBANY INSTITUTE. History of the . . . Lyceum of Natural History. In Albany Inst. Trans. v. 1, pt. 2, appx. p. 25. 1830)

1842 BECK, L. C. . . . The Albany Lyceum of Natural History. . . . (In Nat. Hist. Surv. N. Y. pt. 3: Mineralogy. 1842. pref. p. 12)

1871 MEADS, O[rlando]. Annual address. . . . [On some of the leading facts in the history of the Society.] (In Albany Inst. Trans. v. 7, p. 1–34. 1872)

Address Delivered May 25, 1871.

Papers on Natural History

1823 BECK, L. C., and TRACEY, J. G. Description of a new species of Ranunculus, with remarks.

In N. Y. Med. & Phys. Jour. (1822), v. 2, p. 112–16. Mar. 1823.

1824 BECK, T. R. Address delivered before the Lyceum of Natural History at its first anniversary, March 1, 1824.

In Albany Inst. (1824). Trans. v. 1, p. 137–47. 1830. Gives an interesting summary of the contemporary condition of natural history studies; and a discourse on the various branches of the field.

THE BOSTON JOURNAL OF PHILOSOPHY AND THE ARTS (1823)

History

THE BOSTON JOURNAL OF PHILOSOPHY AND THE ARTS, was a bi-monthly scientific journal devoted primarily to reprinting articles from the foreign scientific journals. The first number appeared in May, 1823, and three volumes in all of the Journal were published.

It gave frequent lists of the plants added to the Cambridge Botanic Garden, then under the supervision of Thomas Nuttall. See Cambridge Bot. Gard. (1805).

Bibliography

1823 (The) BOSTON JOURNAL OF PHILOSOPHY AND THE ARTS, exhibiting a view of the progress of discovery in natural philosophy, mechanics, chemistry, geology and mineralogy, natural history, comparative anatomy and physiology, geography, statistics, and the fine and useful arts; conducted by J. W. Webster, John Ware, and Daniel Treadwell. . . . Boston, Cummings & Hilliard, 1823–26. 3 v.

v. 1 May, 1823–May, 1824.
2 July, 1824–July, 1825.
3 Oct. 1825–Dec. 1826.

Papers on Natural History

1823 **v. 1, no. 3, September.**

Ware, John. Some account of the discovery of the fossil bones of the Mastodonte or great American Mammoth, and of the anatomical character of that animal. art. 31, & 45. p. 257–69, 391–406.

Art. 45 in no. 4, Nov. 1823.

1824 **v. 1, no. 5, January.**

Harris, T. W. Description of four native species of the genus Cantharis. art. 58, p. 494–502.

Repr. in New England Jour. Med. & Surg. v. 13, p. 243–50. July, 1824.

v. 2, no. 2, September.

Vanuxem, Lardner, and Keating, W. H. Observations upon some of the minerals discovered at Franklin, Sussex County, N. J. art. 19, p. 133–38.

Rd before Phila. Acad. Nat. Sc. (1812), June 1, 1824. In its Jour. v. 4, pt. 1, p. 3–11. 1824.

v. 2, no. 3, November.

Webster, J. W. Remarks on the geology of Boston and its vicinity. art. 29, p. 277–92.
Cont. in v. 3, no. 5, p. 486–89. July, 1826.
See also Merrill, (1), p. 283–84. (See Annot. Bib.)

Nuttall, Thomas. List of rare or interesting plants which have flowered in the Botanical Garden, Cambridge, during the last months. p. 299–300.
See also Cambridge Bot. Gard. (1805). Cont. in v. 2, no. 4, & 5, p. 395–96, 505–12. Jan. & Mar. 1825. Cont. in no. 6 (see below).

1825 **v. 2, no. 6, May.**

Jeffries, John. Some account of the dissection of a Simia satyrus, Ourang-outang, or wild man of the woods. art. 62, p. 570–80.

Harris, T. W. Description of a non-descript species of the genus Condylura. art. 63, p. 580–83.

Webster, J. W. Fossil remains from Louisiana. p. 604–7.
From the Louisiana Gazette.

Shephard, C. U. Notice of several new localities of American minerals. p. 607–10.

Nuttall, Thomas. A list of the plants . . . (cont.) p. 611–14.
Cont. from v. 2, no. 3 (above, q.v.)
Cont. in next entry.

v. 3, no. 1, October.

———. A list of plants . . . (cont.) p. 103–4.
Cont. from preceding entry (above, q.v.)

1826 **v. 3, no. 6, October.**

Dearborn, H. A. S. Sketch of the mineralogy of Gay Head, and of Bird Island, with a description of a large sun fish, caught in Vineyard Sound. p. 588–92.

Field, Martin. Notice of the discovery and geological situation of the native gold of Vermont. p. 592–94.

Webster, J. W. Notice of the mineralogy of Nova Scotia and of several new localities of American minerals. p. 594–99.

THE LONG EXPEDITION TO THE ST. PETER'S (1823)

History

Under orders from the Secretary of War, dated April 25, 1823, Major Stephen Harriman Long was appointed to take charge of an expedition to the source of the St. Peter's River, Lake Winnipeg and the Lake of the Woods.

His instructions were as follows:

''The route of the Expedition will be as follows: Commencing at Philadelphia, thence proceeding to Wheeling in Virginia, thence to Fort Armstrong or Dubuque's Lead Mines, thence up the Mississippi to Fort St. Anthony, thence to the source of the St. Peter's River, and the forty-ninth degree of north latitude, thence along the northern boundary of the United States, Lake Superior, and thence homeward by the Lakes.

''The object of this Expedition is to make a survey of the country on the route pointed out, together with a topographical description of the same, to ascertain the latitude and longitude of all the remarkable points, to examine and describe the productions, animal, vegetable and mineral, and to enquire into the character, customs, etc., of the Indian tribes inhabiting the same. . . .''

''The party left Philadelphia April 30, 1823, and returned October 26, 1823. Associated with Long were Thomas Say, as zoologist, botanist and antiquarian of the expedition; William H. Keating, mineralogist and geologist; James Edward Colhoun, astronomer, Samuel Seymour, landscape painter and designer. Edwin James was originally appointed as the physician, botanist and geologist of the expedition, but failed to meet the expedition at the designated place. Keating wrote the Narrative of the Expedition (see below).''

See also Warren, G. K., p. 24–5, for further details of the route followed. For a criticism of the geological portions of the expedition, see MERRILL, (1), p. 274–76. (See Annot. Bib.).

The party covered more than 4,500 miles in their travels.

''From Mr Say's notes, all that relates to the zoology and botany of the country traversed has been obtained, as well as much matter relating to the Indians. The last department has been completed from the compiler's own notes, which have likewise furnished the geological observations.

''The greater part of the Appendix (in v. 2), will be found to have been prepared by Mr Say. The loss which he experienced by the skins of many birds, quadrupeds and fish, which he had collected, has prevented him from describing several new animals. It is believed that if none of the shells collected had been lost, the amount of new species described would have been much greater. The plants preserved by Mr Say were placed in the hands of Mr Lewis D. de Schweinitz, who kindly undertook to describe them. . . .'' KEATING; Preface.

Nuttall had originally expected to describe the plants but his absence in Europe at the time made the change to De Schweinitz necessary.

Bibliography

1824 *BELTRAMI, G[iacomo] C[ostantino]. La decouverte des sources du Mississippi et de la riviere Sanglante. New Orleans, 1824. 328 p.

Repub. Lond. 1828. 2 v. entitled: ''A pilgrimage in Europe and America. . .''

He was attached originally to Long's expedition to the St. Peter's, but owing to a disagreement, he left the party early in the expedition, and went off on his own explorations.

Report

(1) Philadelphia edition.

1824 KEATING, William H[ippolitus]. Narrative of an expedition to the source of St. Peter's River, Lake Winnepeek, Lake of the Woods, etc., performed in the year 1823, by order of the Hon. J. C. Calhoun, Secretary of War, under the command of Major Stephen H. Long, U. S. T. E.; compiled from the notes of Major Long, Messrs Say, Keating and Colhoun, by William H. Keating. . . . Philadelphia, H. C. Carey & I. Lea, 1824. 2 v. illus. 15 pl. map.

v. 1 pref. p. 5–12, + (2), + 9–439, 15 pl. map. pl. 14–15 (of shells), 4 + 11 fig.

v. 2 pref. p. 5–6,+ 5–459.

Rev. in North Amer. Rev. v. 21, p. 178–89. July, 1825.

(2) London edition.

1825 ————. Same. London, Printed for Geo. B. Whittaker, 1825. 2 v. illus. 8 pl. map.

v. 1, 13 + (3), + 458 p. 5 pl.

v. 2, 6 + 248 + 154 p. 3 pl.

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		II: SCHWEINITZ, L. D. de. A catalogue of the plants collected in the northwestern territory by Mr. Thomas Say, in the year 1823.
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417	140	3 Meteorology.
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Say's Entomological material above, also in the Repr. of his Entomological Writings; ed. by J. L. Le Conte. Phila. 1859 & 1891. v. 1, p. 176–258.

Say's article on Conchology (see C above), repr. in Complete conchological writings of T. S., ed. by W. G. Binney. N. Y. 1858. p. 128–31.

LYCEUM OF NATURAL HISTORY OF THE BERKSHIRE MEDICAL INSTITUTION, PITTSFIELD, MASS. (1823)

History

"... After the delivery of the preceding discourse, several gentlemen from Berkshire and the adjoining counties formed a Society under the name of the LYCEUM OF NATURAL HISTORY OF THE BERKSHIRE MEDICAL INSTITUTION, and adopted a constitution.

"At a subsequent meeting of the Lyceum, the following officers were elected: President, Chester Dewey; Vice-presidents: Edward

Hitchcock, David Hunt, and J. P. Batchelder; Curators: H. H. Childs and C. Wright; Recording Secretary, H. K. Strong; Treasurer: S. M. McKay.

"The Lyceum have the pleasure of acknowledging the reception of several boxes of minerals and shells, Indian implements and animals from different parts of the country. A respectable cabinet of minerals is already collected. The specimens in natural history are arranged in a room appropriated to the purpose, in the Medical Institution. Considerable additions are expected from the nearly 80 students now attending the course of medical lectures. The Lyceum respectfully solicits the aid of gentlemen in increasing their cabinet of curiosities. . . ." HITCHCOCK, Edward. Utility of natural history. p. 32. (see PAPERS: 1823, below).

The Lyceum remained in existence for several years and then expired, probably in the late twenties. Its subsequent history has been difficult to determine. Prof. Dewey was its most active member. Papers read before the Lyceum were published in the AMERICAN JOURNAL OF SCIENCE (1818).

According to the Amer. J. Sc. v. 9, p. 177, Jan. 1825, Jacob Porter and Lewis C. Beck were added to the Lyceum as curators.

Papers on Natural History

All except that by Hitchcock, in the American Journal of Science (1818)

1823 HITCHCOCK, Edward. Utility of natural history: a discourse delivered before the Berkshire Medical Institution at the organization of the Lyceum of Natural History, in Pittsfield. . . Pittsfield, Mass., 1823. 32 p. Rd Sept. 10, 1823.
Rev. in North Amer. Rev. v. 18, p. 213–14. 1824.

1824 DEWEY, Chester. Caricography.
In v. 7, no. 2, p. 264–78. Feb. 1824.

————. A sketch of the geology and mineralogy of the western part of Massachusetts, and a small part of the adjoining states.
In v. 8, p. 1–60, 240–44. May & Aug. 1824.

————. Caricography (cont.).
In v. 8, p. 93–9, 264–67. May & Aug. 1824.

LEE, C. A. A sketch of the geology and mineralogy of Salisbury, Connecticut.
In v. 8, no. 2, p. 252–61. Aug. 1824.

1825 PORTER, Jacob. Notice of the rocking-stone in Savoy, Mass.
In v. 9, no. 1, p. 27–8. Jan. 1825.

DEWEY, Chester. Caricography (cont.)
In v. 10, p. 30–48, 4 col. pl. Nov. 1825.

1826 ————. Caricography (cont.)
In v. 10, p. 265–84. Feb. 1826.

————. Caricography (cont.)
In v. 11, p. 147–67, 304–25, 5 + 3 col. pl. Jan. & Oct. 1826.

NORTH CAROLINA GEOLOGICAL SURVEYS (1823)

History

"It is noteworthy that the first geological survey by public authority in America, was made by the state of North Carolina. The first suggestion of such a survey was made by Prof. Olmsted of the State University, in 1821, in a letter to the Board of Public Improvements. . . ."

"The suggestion was renewed by Professor Olmsted a year or two later with the proposal to spend his vacations in geological excursions, and he asked 'merely such an appropriation as would defray the expenses of the undertaking.' The result was the passage of an Act of Assembly in 1823, authorizing the Board of Agriculture to have such survey made and appropriating for the purpose the sum of $250 a year for four years. This appropriation was afterwards renewed for two years."

"The survey thus ordered was partly executed by Prof. Olmsted, and after his removal to Yale College, was continued by Dr Mitchell. The published results consist of two Reports of Prof. Olmsted, issued in 1824 and 1825, and a third on the mineralogy of the state, by his assistant, C. E. Rothe, and two Reports (1826 & 1827) by Dr Mitchell. A geological map of the eastern half of the state was also prepared by the former, but was never published and has disappeared. . . ."

"Dr Mitchell continued his explorations during his vacations, on his own private account, and gave a summary of the result in a text-book for his classes, published in 1842, with a small geological map of the state, the only one hitherto published. The work was resumed under the existing law on the subject by Dr E. Emmons, who received the appointment of state geologist in 1852. He retained the office, nominally at least, until his death, in 1863, but the actual work of the Survey seems to have closed in 1860, the geologist having been called to other duties by the exigencies of the War. Dr E. Emmons, Jr., was appointed assistant geologist. Dr Emmons has given the results of his work in five Reports . . . issued in 1852, 1856, 1858, and 1860. . . ." (See below).

A ''Report'' on the ''Woody plants'' of the state, prepared by Dr M. A. Curtis, at the request of Dr Emmons, was also published; and a ''Catalogue of the Plants of the state,'' by the same author, failing of publication at that time, has since been issued (1867), since the War. Dr Emmons also prepared a draught of a geological map, which however has never been published. . . .

Dr Curtis also prepared a partial report on the Zoology of the State, which the Legislature declined to publish, and he left in MS an extensive work, on the flowerless plants of the state. The work of the Survey remained suspended from the date of Dr Emmon's death until the latter part of 1866. . . . The present incumbent resumed operations under commission of Gov. Worth. Extracts above are from W. C. KERR. Historical sketch. (In Geol. Surv. N. C. Report. 1875. v. 1, pref. p. 7–9).

Olmsted's resignation took place in 1825. The Act authorizing the Survey under Emmons was passed during the 1850–51 session of the North Carolina Legislature, and ratified, January 24, 1851. Emmons was appointed October 8, 1851, and the actual work on the Survey began in January, 1852.

Annual appropriations of $5,000 for five years were granted by the Legislature. Emmons' assistants during the life of the Survey were his son, Ebenezer Emmons, Jr., who served until 1864; Spence McClenahan, assistant geologist, 1852–54; Matthew B. Conklin, April 1, 1858 to March 31, 1860; C. D. Smith, 1859; and M. A. Curtis, in the capacity of botanist and zoologist, 1860–62. Emmons died October 1, 1863.

''The Cabinet of the Survey, located in the Capitol building at Raleigh, contained a considerable number of specimens of rocks, minerals, ores, fossil plant and animal remains, soils, marbles, etc., and was said to be of considerable value. At the close of the Civil War, it was nearly destroyed by soldiers passing through the city. The remainder was transferred to the State University where it is at present.'' J. A. HOLMES, p. 10. (See Bibliography below.)

There is also a comprehensive history of the surveys of the state to 1885, by Merrill (see Bibliography: 1920, below). According to him, the expenses of the respective surveys under Mitchell-Olmsted and Emmons were $1,250 and $58,611.60, respectively.

R. H. Northrup served as assistant geologist from 1863 to 1864. The Emmons survey officially terminated upon the resignation of E. Emmons, Jr., April 1, 1864. Shortly thereafter W. C. Kerr was appointed state geologist but he accomplished little until his reappointment in 1866.

See below BIBLIOGRAPHY, for publications relative to the history of the various surveys; the REPORTS, for an analysis of the various Reports published during the different surveys; and PAPERS IN SCIENTIFIC JOURNALS . . . which were concerned with the state surveys.

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1842 MITCHELL, Elisha. Elements of geology; with an outline of the geology of North Carolina. . . . n. p. 1842. 141 p. map.

1875 KERR, W[ashington] C[aruthers]. Historical sketch. Raleigh, 1875. (In N. C. Geol. Surv. Report. 1875. v. 1, pref. p. 7–18)

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1889 HOLMES, J[oseph] A[ustin]. Historical notes concerning the North Carolina Geological Surveys. (In Elisha Mitchell Sc. Soc. Jour. v. 6, pt. 1, p. [5]–18. June, 1889.

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1904 MERRILL, George P[erkins]. North Carolina Surveys. Wash. 1906. (In U. S. Nat. Mus. Ann. Rept. for 1904. p. 266–68, 430–32).

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1909 LANEY, Francis Baker, and WOOD, Katherine Hill. . . . Bibliography of North Carolina geology, mineralogy, and geography; with a list of maps. Raleigh, E. M. Uzzell & co., 1909. 3 + 428 p. (In N. C. Geol. & Econ. Surv. Bull. no. 18)

Pt. 1 Bibliography of geology, etc. p. 1–267. Arranged alphabetically by author, with sub-arrangement alphabetically by title. 1935 entries.
2 List of maps of N. C. p. [269–362]. 784 entries.
Index. p. [363]–428.

1914 SMITH, Eugene Allen. Pioneers in gulf coast plain geology. N. Y. Mar. 30, 1914. (In Geol. Soc. America. Bull. v. 25, p. 157–78)

1920 MERRILL, George P[erkins], ed. North Carolina Geological Surveys. Washington, Gov't. print. office, 1920. (In U. S. Nat. Mus. Bull. no. 109. p. 363–87, port.)

Historical account compiled mainly from MS notes by J. A. Holmes, of the state surveys to 1885.

1924 ————. Same. New Haven, Yale Univ. Press, 1924. (In his First one hundred years of American geology. p. 94–6, 114–16, 298–300, 431–32, 473–76, port.)

Reports

Olmsted-Mitchell Survey.

1824 OLMSTED, Denison. Report on the geology of North Carolina, conducted under the direction of the Board of Agriculture; part 1. Raleigh, Nov. 1824. 44 p.

Rev. in Amer. J. Sc. v. 14, no. 2, p. 230–51.

July, 1828. See also MERRILL, (1), p. 266–68. (See Annot. Bib.) See also MERRILL (1924 above), p. 94–6. For this & following items.

1825 ————. Report on the geology of North Carolina, conducted under the direction of the Board of Agriculture; part 2. Raleigh, Nov. 1825. 58 p.

Rev. in Amer. J. Sc. v. 14, no. 2, p. 230–51 July, 1828.

1827 ROTHE, C[harles] E[dward]. Report on the geology of North Carolina, conducted by the Board of Agriculture; part 3. Raleigh, 1827. (In its Papers on Agricultural subjects. p. 29–43).

Repr. under title of "Remarks on the gold mines of North Carolina," in the Amer. J. Sc. (1818), v. 13, no. 2. p. 201–17, sect. Jan. 1828.

Also repr. under "Geognostische und mineralogische Bemerkungen uber den Nord-Amerikanischen Freistaat Nord-Karolina. (In Leonard's Zeitschrift. Heft. II. p. 349–62).

Report rendered in 1826.

MITCHELL, Elisha. Report on the geology of North Carolina conducted under the direction of the Board of Agriculture; part 3. (In its Papers on agricultural subjects. Raleigh, 1827. p. 1–27).

For criticisms of this & following reports, see MERRILL (1924 above), p. 114–16.

1828 ————. Geological report on North Carolina . . . conducted under the direction of the Board of Agriculture; part 3. Raleigh, 1828. (In its Papers on agricultural subjects. p. 101–8).

1846 ————. Report on the turnpike from Raleigh, west. (In Message from his Excellency, Gov. Graham, communicating report of Prof. Mitchell. Raleigh, W. R. Gales, 1846. 18 p.)

Emmons Survey

1852 EMMONS, Ebenezer. Report of . . . his Geological Survey of North Carolina. Raleigh, 1852. 181 p. (In N. C. Gen. Assem. Sess. 1852. Ex. Doc. no. 13).

5000 copies printed. For criticism of this & the succeeding Reports, see MERRILL, (1), p. 430–32. (See Annot. Bib.). See also MERRILL (1924 above), p. 298–300.

1855 ————. Report of the progress and present state of the geological and agricultural survey of North Carolina. Raleigh, W. W. Holden, 1855. 20 p. (In N. C. Gen. Assem. Sess. 1855. Ex. Doc.)

1856 ————. Geological report of the Midland counties of North Carolina . . . New York, G. P. Putnam, & Raleigh, H. D. Turner, 1856. 20 + 352 p., illus. 9 pl. 8 maps, sect. ......

Report rendered Oct. 1, 1856. Contains 42 chapters. Rev. in Amer. J. Sc. v. 74 (ser. 2, v. 24). p. 427–30. Nov. 1857, by Chester Dewey.

1857 ————. National Foundry, Deep River, N. C.; special report concerning the advantages of the Valley of the Deep River as a site for the establishment of a national foundry. Raleigh, 1857. 14 p.

Appx. in MS, to the special Report, Mar. 27, 1858. 5 p.

1858 ————. Report of the North Carolina Geological Survey; agriculture of the eastern counties, together with descriptions of the fossils of the marl beds. Raleigh, H. D. Turner, 1858. 16 + 314 p.

2000 copies published.

1860 ————. Agriculture of North Carolina; part 2; containing a statement of the principles of the science upon which the practice of agriculture as an art is founded. Raleigh, W. W. Holden, 1860. 112 p.

CURTIS, M[oses] A[shley]. Geological and natural history survey of North Carolina; part 3; Botany; containing a catalogue of the plants of the state with descriptions and history of the trees, shrubs and woody vines. Raleigh, 1860. 124 p.

Rev. in Amer. J. Sc. v. 80 (ser. 2, v. 30), p. 275–76. Sept. 1860.

EMMONS, Ebenezer. Agriculture: containing descriptions, with many analyses of the soils of the swamp lands. Raleigh, W. W. Holden, 1860. 95 p.

1861 RUFFIN, Edmund. Agricultural, geological, and descriptive sketches of lower North Carolina and the similar adjacent lands. Raleigh, 1861. 296 p.

EMMONS, Ebenezer. Geological and agricultural survey. Raleigh, 1861. 6 p. (In N. C. Gen. Assem. Sess. 1860–61. Ex. Doc. no. 26.)

————. Report on the natural resources of that part of North Carolina west of the Blue Ridge. Raleigh, 1861. (In N. C. Gen. Assem. Sess. 1860–61. Ex. Doc. no. 25. appx. B. p. 7–9.)

1867 CURTIS M[oses] A[shley]. Geological and natural history survey of North Carolina, part 3; Botany: containing a catalogue of the indigenous and naturalized plants of the state. Raleigh, Inst. for the Deaf, and Dumb and Blind, 1867. 156 + [2] p.

Contains 4849 species. Flowering plants: p. [7]–67, 1873 species; Flowerless plants: p. [68]–156, 3076 species. On account of the War, the Report was not printed until 1867, although it was ready several years earlier.

Miscellaneous Papers in Scientific Journals and Transactions, Connected with the Surveys

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Repr. in Philosophical Mag. v. 65, p. 375–84. 1825. Rev. in Bost. Jour. Philos. & Arts. v. 2, p. 288–89. 1825.

1828 Mitchell, Elisha. On the character and origin of the low country of North Carolina.

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1829 ————. On the geology of the gold region of North Carolina.

Written Aug. 25, 1828. In Amer. J. Sc. (1818), v. 16, no. 1, p. 1–19. Apr. 1829. See also Merrill, (1), 285–86. (See Annot. Bib.)

1844 Ruffin, Edmund. Supplementary report of the Agricultural Survey for 1843 of S. C. . . . Secondary and Miocene marls. (In Southern Agric. & Register of Rural Affairs. ser. 2, v. 4, p. 122–27. 1844)

Contains N. C. matter.

1857 Emmons, Ebenezer. Fossils of the sandstones and slates of North Carolina.

Rd before the Amer. Assoc. Adv. Sc. (1848), Aug. 1857. In its Proc. v. 11, p. 76–80.

1858 ————. The chemical constitution of certain of the Chatham series in the valley of Deep River, North Carolina.

Rd before the Amer. Assoc. Adv. Sc. (1848), May, 1858. In its Proc. v. 12, p. 230–32.

1861 ————. Gold veins in the Syenetic granite of the Salisbury and Greensborough belt, North Carolina. Extracted from his Report on the Midland Counties, 1856 (see Repts. above).

In Mining Mag. 1853, ser. 2, v. 2, p. 25–36. 1861.

NEWBURGH LYCEUM OF NATURAL SCIENCES, NEWBURGH, NEW YORK (1823)

History

The formation of a "Lyceum of Natural Sciences" at Newburgh, New York, was noted in the American Journal of Science, v. 10, p. 372, Feb. 1826, by S. E. Dwight.

"The Newburgh Lyceum of Natural Sciences was organized September 7, [1823], and had an active existence for several years. Its officers were as follows: President: Wm. Rose; vice-presidents, David R. Arnell, Albert Christie, A. M. Smith, S. R. Betts, David Fowler; corres. secretaries, James R. Wilson, Luther Halsey, Jr.; treasurer, Wm Seymour; curators, John T. Halsey, John Johnston and George Gordon."

Below is given the title and reference to a paper read before the Lyceum. The above citation is taken from (RUTTENBER, E. M. History of the town of Newburgh. Newburgh, 1859. p. 256).

Papers on Natural History

1823 WILLSON, James R. An address delivered before the Newburgh Lyceum of the Natural Sciences . . . on the 10th of November, 1823. Newburgh, J. D. Spalding, 1823. 28 p.

Copy examined in Library of Amer. Mus. Nat. Hist., N. Y.

1824 SILLIMAN, Benjamin. Notice of new localities of Sahlite, Augite, Ceylanite, etc.

In Amer. J. Sc. (1818), v. 8, no. 1, p. 88–92. May, 1824.

UTICA LYCEUM OF NATURAL HISTORY (1823)

History

The organization of a Lyceum of Natural History at Utica, New York, was noted in the American Journal of Science, v. 10, p. 372, Feb. 1826, by S. E. Dwight, who compiled a list of the scientific associations in existence at the time.

"A literary enterprise of the era was the Utica Lyceum, which was formed on the 27th of November, 1823, its purpose being to encourage the study and disseminate a knowledge of natural history and other useful sciences. Its constitution was drafted by William H. Maynard, and the following constituted its earlier officers: Jonas Platt, president; Nathan Williams, first vice-president; Morris S. Miller, second vice-president; Thomas Goodsell, secretary, A. B. Johnson, treasurer; Messrs Maynard, Beardsley, Skinner, Kirkland and William Williams, curators. The following year, Mr. Johnson was elected president, and delivered an address. . . .

"Anything like a continuous history of the Society it is impossible to give as its records are now lost. It was incorporated January 21, 1826, and lasted until 1832 or 1833, when it was succeeded by the Young Men's Association. . . . The presidents were William H. Maynard, 1829, Charles A. Mann in 1832. . . ." From BAGG, M. M. Pioneers of Utica. 1877. p. 558–59.

ALBANY INSTITUTE, ALBANY, N. Y. (1824)

History

The ALBANY INSTITUTE was organized on the 5th of May, 1824, by the union of the Albany Lyceum of Natural History (1823), q. v., and the Society for the Promotion of Useful Arts (1804), q. v., the latter having succeeded the Society for the Promotion of Agriculture, Arts & Manufactures, New York City & Albany, (1791), q. v.

The Institute consisted of three departments: 1) The physical sciences; 2) Natural history; 3) History and general literature. The Albany Lyceum of Natural History became the second of these departments with Elisha Jenkins as its presiding officer. The President of the Lyceum, Stephen Van Rensselaer, became the president of the Institute, and served until 1837. The Society for the Promotion of Useful Arts became the Historical Department of the Institute.

The curators of the natural history department at its origin were M. H. Webster, R. V. De Witt and James Eights. In 1842, L. C. Beck, in charge of the ''Mineralogy'' of the Natural History Survey of N. Y. (1836), q. v.), writes: ''The Albany Institute was selected as the depository of all the specimens which were collected in the early geological surveys conducted under the patronage of the Hon. Stephen Van Rensselaer. A liberal donation was also made to it by William Caldwell, to be devoted exclusively to the purchase of books on mineralogy, and thus the Library was furnished with almost every important work in natural science . . .''

In 1849, the Institute's Museum contained 10,444 specimens and the Library, 3,323 volumes. In 1852, T. R. Beck was president of the Institute, and 1864, J. V. L. Pruyn.

Up to 1865, the chief workers in the natural history section of the Institute were T. R. Beck, H. Wendell, Fred. Townsend, C. H. Anthony, A. H. Brown, J. H. Armsby, James Hall, F. B. Meek, James Eights, L. C. Beck, James Geddes, Jacob Green, G. W. Clinton, J. G. Tracey.

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1825 BECK, T. R. First annual report of the Albany Institute. Albany, 1825.

A rare pamphlet.

1830 ALBANY INSTITUTE. Transactions . . . Albany, 1830–93. 12 v.

For the dates of publication of the separate volumes up to 1865, see below.

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Charter, p. 5–6, Catalogue of library, p. 7–24; Proceedings, p. 24–64. Members, p. 65–74.

1855 WOOD, George. Catalogue of the Albany Institute Library founded 1793. Albany, 1855. 5 + 454 p. (In Albany Inst. Trans. v. 3).

1870 PRATT, Daniel J. Manual of the Albany Institute; prepared under the order of the Institute, March, 1870. (In Albany Inst. Trans. v. 6, p. 299–344).

Contains a history, the charters, the constitution, a list of the members and officers of the Institute from its foundation to 1870.

1871 MEADS, O[rlando]. Annual address . . . [On some of the leading facts in the history of the Society]. . . . (In Albany Inst. Trans. v. 7, p. 1–34. 1872)

Rd before Inst. May 25, 1871.

1873 ALBANY INSTITUTE. Proceedings. . . . Albany, 1873–78. 2 v.

v. 1, 1873 Covers Mar. 1865–Sept. 1872.
2, 1878 ‘‘ Oct. 1874–Dec. 30, 1877.

1889 KIP, Leonard. Our retrospect. (In Albany Inst. Trans. v. 12, p. 103–21. 1893)

Rd before the Inst. May 21, 1889.

Transactions (T)

Dates of Publication.

v. 1,	1830,	pt. 1,	7 + 250 p.
		pt. 2,	74 p.
2,	1833–52		8 + 354 p.
3,	1855		5 + 454 p.
4,	1858–64		8 + 323 p.
5,	1867		3 + 337 p.

Papers on Natural History

1824 Beck, T. R. A notice of the family of fossil remains called Trilobites. . . T. v. 1, appx. pt. 2, p. 27. Rd July 14.

Clinton, De Witt. A description of the Testudo ferox. . . T. v. 1, pt. 2, appx. p. 29. Rd Sept. 1.

Beck, L. C. An examination of the question whether the climate of the Valley of the Mississippi under similar parallels of latitude, is warmer than that of the Atlantic coast? T. v. 1, pt. 1, art. 7, p. 34–54. Rd Sept. 21.

De Kay, J. E. A notice of the Testudo ferox, Pennant. T. v. 1, pt. 2, appx. p. 30. Rd Oct. 13.

Beck, L. C. . . . On the lead and lead mines, including a minute account of the lead mines of the western states. T. v. 1, pt. 2, appx. p. 31, 36–40. Rd Dec. 29, 1824 & Jan. 12, & Mar. 16, 1825.

1825 Stebbins, C. M. A paper on plants growing in the vicinity of the city of Hudson. T. v. 1, pt. 2, appx. p. 33–4. Rd Feb. 16.

Beck, T. R. On the bituminous coal of Tioga, Pa. T. v. 1, pt. 2, appx., p. 34. Rd Feb. 16.

Webster, M. H. A description of the Hystrix dorsata or North American porcupine, with observations on its habits. . . T. v. 1, pt. 2, appx. p. 35. Rd Feb. 16.

————. A description of . . . Unio crassus of Say, var. giganteus of Barnes. . . T. v. 1, pt. 2, appx. p. 35. Rd Mar. 2.

M'Kercher, Duncan. On the natural history of the black oxide of manganese and its application to the arts. T. v. 1, pt. 2, appx., p. 35. Rd Mar. 2. (Title only).

Beck, L. C. An account of the salt springs at Salina, Onondaga, with a chemical examination of the water, and of several varieties of salt manufactured at Salina and Syracuse. T. v. 1, pt. 2, appx. p. 42. Rd Apr. 27.

In N. Y. Med. & Phys. Jour. (1822), v. 5, p. 176–99. June, 1826.

1826 Vanuxem, Lardner. On the mineralogical and geological examination of South Carolina. T. v. 1, pt. 2, appx., p. 51. Rd Feb. 15. (Title only)

See also S. C. Geol. Surv. (1824)

Beck, L. C. On some new species of the genus Rosa. T. v. 1, pt. 2, appx. p. 51. Rd Mar. 1.

Geddes, James. Observations on the geological features of the south side of the Ontario Valley. . . T. v. 1, pt.1, art. 8, p. 55–9, illus. Rd Feb. 15.

Also in Amer. J. Sc. (1818), v. 11, no. 2, Oct. 1826, p. 213–18, illus.

Clinton, G. W. Description of the hawk in the cabinet of the Institute. . . T. v. 1, pt. 2, appx. p. 51. Rd Mar. 15.

Beck, L. C., and Emmons, E[benezer]. Description of the Grevilleanum serratum, a new genus, belonging to the order Musci.

In Amer. J. Sc. (1818), v. 11, no. 1, p. 183, illus. June, 1826.

1827 Clinton, G. W. Notice of the graphite of Ticonderoga. T. v. 1, pt. 1, art. 21, p. 233–35. Rd Feb. 14.

1828 Tracey, J. G. On the Uvularia grandiflora, as a remedy for the bite of the rattlesnake. T. v. 1, pt. 1, art. 6, p. 32–4. Rd Feb. 29.

Ingalls, T. R. On the luminous appearance of the ocean. T. v. 1, pt. 1, art. 2, p. 8–9. Rd Mar. 26.

Also in Amer. J. Sc. (1818), v. 17, no. 1, p. 209–11. Oct. 1829.

Beck, L. C. On the geographical botany of the United States. T. v. 1, pt. 1, art. 3, p. 10–21. Rd Mar. 26.

1829 Morse, J. O. Observations on the great greywacke region of the state of New York. T. v. 1, pt. 1, art. 10, p. 84–5. Rd Oct. 28.

Henry, Joseph. Topographical sketch of the state of New York, designed chiefly to show the general elevations and depressions of its surface. T. v. 1, pt. 1, art. 11, p. 87–112, pl. Rd Oct. 28.

1830 Eaton, Amos. Observations on the coal formations in the state of New York, in connection with the great coal beds of Pennsylvania. T. v. 1, pt. 1, art 14, p. 126–30. Rd Mar. 11.

Also in Amer. J. Sc. (1818), v. 19, no. 1, p. 21–6. Oct. 1830.

Green, Jacob. Monograph of the cones of North America, including three new species. T. v. 1, pt. 1, art. 13, p. 121–25, 1 pl. Rd June 7.

————. The Dolia of the United States. T. v. 1, pt. 1, art. 15, p. 131–33, 1 pl. Rd June 7.

————. Notes on the American shells figured in the Supplement to the ''Index testaceologicus'' of W. Wood. T. v. 1, pt. 1, art. 16, p. 134–36. Rd June 7.

Beck, L. C., and Tracy, J. G. Note respecting the Ranunculus lacustris. T. v. 1, pt. 1, art. 18, p. 148–49, 1 pl. Rd June 7.

Green, Jacob. Reclamation of Salamanders in a letter to Cuvier. . . T. v. 1, pt. 1, art. 19, p. 150–51. Rd June 7.

1833 Eights, James. Description of a new crustaceous animal found on the shores of the South Shetland Islands, with remarks on their natural history. . . T. v. 2, art. 4, p. 53–69, [354], 2 pl. [10 fig.] Com. July 10.

Abstr. in Amer. J. Sc. (1818), v. 72 (ser. 2, v. 22), p. 391–97, 2 pl. Nov. 1856.

1852 ————. Description of a new animal belonging to the Crustacea, discovered in the Antarctic Seas by the author. T. v. 2, art. 16, p. 331–34, 2 pl.

For Abstr. see preceding entry.

————. Observations on the geological features of the Post-Tertiary formation of the city of Albany, and its vicinity. T. v. 2, art. 17, p. 335–53, sect. Acc. Mar. 4.

1856 Hall, James. Description of new species of fossils from the Carboniferous limestones of Indiana and Illinois. T. v. 4, art. 1, p. 1–36. Rd Nov. 27.

1858 Meek, F. B. Descriptions of new organic remains from the Cretaceous rocks of Vancouver's Island. T. v. 4, art. 2, p. 37–49.

Fossils collected by J. S. Newberry in Pacific RR. Surv. (1853), Williamson & Abbott's Exped., v. 6, q.v.

MEEK, F. B., and HAYDEN, F. V. Descriptions of new organic remains from northeastern Kansas, indicating the existence of Permian rocks in that territory. T. v. 4, art. 4, p. 73–88, 247–48, 258–59. Rd Mar. 2.

Notes, p. 247–48, by James HALL.
Art. wrongly no. should be art. 5. See also MERRILL, (1), 467, ft. note, p. 485–87. (See Annot. Bib.)

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———. . . . On mountain ranges. . . T. v. 4, p. 284–85. Rd Apr. 3 & 17. (Abstract).

HOMES, H. A., and HALL, James. Upon the recent alleged proofs of the existence of man at a former geologic period. T. v. 4, p. 286–87. Rd May 31. (Abstract).

HALL, James. On the geology of Wisconsin. T. v. 4, p. 288. Rd. Dec. 21. (Abstract).

1861 ———. 1) Description of the rock in which the oil wells of Pa. are found. . . 2) Gas springs and deposits in U. S. and Canada. . . 3) Taconic system. . . T. v. 4, p. 289. Rd Jan. 29. (Abstract).

———. Geology of N. Y. State. T. v. 4, p. 292–93. Rd May 28. (Abstract).

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Also in N. Y. State Cab. Nat. Hist. (1843). Rept. v. 16, p. 17–226, 16 pl. 1862. (see p. 119–220).

———. Notice of some new species of fossils from a locality of the Niagara group in Indiana; with a list of identified species from the same place. T. v. 4, art. 12, p. [195]–228, 301. Rd Apr. 29.

Revised ed., in v. 10, p. 57–76. 1883. Also in N. Y. State Mus. Ann. Rept. for 1874. p. 99–203. 1879.

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Abstracts in Amer. J. Sc. (1818), ser. 2, v. 35, p. 396–406, illus. May, 1863. & ser. 2, v. 36, p. 11–5, illus. July, 1863.
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SOUTH CAROLINA GEOLOGICAL SURVEYS (1824)

History

The first Geological Survey of the State of South Carolina was authorized by the state legislature in 1824, and Lardner Vanuxem was appointed to carry out the Survey. His partial Report appeared in 1826 (see below), in Robert Mills's "Statistics of South Carolina" and in some of the newspapers of the day.

"The Survey of which the result is contained in the following pages, is due to a movement altogether agricultural. A survey of the state had been long and ably advocated by the late R. W. Roper, Esq., chairman of the Committee on Agriculture; and in 1842, an Agricultural Survey of the State was ordered by the Legislature, and Edmund Ruffin, Esq., of Virginia, whose name and writings are identified with the agriculture of the country, was called to conduct the Survey, by Gov. Hammond. After a year of arduous labor . . . Mr Ruffin resigned (see below, Reports for 1843 and 1844), and I had the honor of receiving a Commission from Gov. Hammond to succeed him in conducting the survey."

"In the renewal of my commission by his Excellency, Gov. Aik, I was directed to make a geological and agricultural survey of the state . . ." TUOMEY, Michael. Pref. p. 1–2, of his 1848 Report (see below).

Tuomey's Reports appeared in 1844 and 1848 (q.v. below). In conjunction with F. S. Holmes, Tuomey published in 1857, the Pleiocene Fossils of South Carolina, for which the Assembly of the State of South Carolina appropriated $2,000 annually for four years. In 1860, Holmes published "Post-Pleiocene fossils."

Oscar Montgomery Lieber received the appointment as the state surveyor in 1856, and submitted four annual Reports, 1856, 1858, 1859 and 1860, respectively (see below). Lieber was assisted by Abraham Hardin and J. Friedman.

" . . . Resolved that this General Assembly authorize the appointment of a geological, mineralogical and agricultural surveyor, whose services shall be engaged for four years, and whose duty it shall be to explore the several districts, and make a geological map, analyze minerals, ores and manures free of charge, and submit an annual report to the Legislature for general circulation . . . That this officer shall receive a salary of $3,000 . . ." LIEBER. Pref. p. 2, to his 1856 Report (see below).

See below Holmes's "History of State Surveys," 1891.

A historical account of the state surveys to 1885 may be found in MERRILL (see Bibliography: 1920, below) which contains reprints of a number of the original acts of authorization and associated documents. The expenses of the two surveys under Tuomey and Lieber were respectively, $11,632.78 and $12,194.58. That of Tuomey includes also Ruffin's expenses.

Tuomey's 1848 Report also includes brief reports by Messrs L. R. Gibbes, Robert Lebby, J. L. Smith, and Thomas W. Glover (see below REPORTS: 1848).

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1918 GEE, Wilson. South Carolina botanists. Columbia, S. C., Sept. 1918. (In Univ. S. C. Bull. no. 72. p. 38–41, port.)

1920 MERRILL, George P[erkins], ed. South Carolina Geological Surveys. Washington, Gov't print. office, 1920. (In U. S. Nat. Mus. Bull. no. 109. p. 459–63, port.)

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1924 ———. Same. New Haven, Yale Univ. Press, 1924. (In his First one hundred years of American Geology. p. 101–2, 239–40, 268–9, 323–25, port.)

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1826 VANUXEM, Lardner. . . . Report on the Geological Survey of the State of South Carolina . . . Charleston, S. C., 1826. (In MILLS, Robert. Statistics of South Carolina. p. 25–30).

Repr. in TUOMEY's Report, 1848 (see below).

Vanuxem delivered a paper "On the mineralogical and geological examination of South Carolina" before the ALBANY INST. (1824), q.v., Feb. 16, 1825. Recorded by title only in its Trans. v. 1, appx. p. 51. 1830.

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See also MERRILL, (1), p. 386–87. (See Annot. Bib.)

See also MERRILL (1924 above), p. 239–40.

For his Supplementary Report see TUOMEY, 1844, next entry.

1844 TUOMEY, Michael. Report on the geological and agricultural survey of the state of South Carolina. Columbia, S. C., 1844. 4 + 63 p.

See also MERRILL, (1), p. 387, 405–6. (See Annot. Bib.)

See also MERRILL (1924 above), p. 239–40, 264–66, 268–69.

Contents:

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RUFFIN, Edmund. Supplemental report of the Agricultural Survey for 1843: Secondary and Miocene marls near Lynch's Creek in Darlington, Sumter, Williamsburg, and Marion Districts, S. C. p. 59–63.

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Rev. by T. S. Bouvé, in Amer. J. Sc. ser. 2, v. 8, no. 22, p. 61–74. July, 1849.

For criticism of the geological aspects of the Survey, see MERRILL, (1), p. 405–6. (See Annot. Bib.)

See also MERRILL (1924 above), p. 239–40, 264–66, 268–69.

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———. Introduction. ch. 1–4. p. [1]–59.

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LEBBY, Robert. Meteorological table . . . p. [25]–30.

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See Vanuxem's Report under 1826 (above).

GLOVER, Thomas W. Indigo. p. [33]–4.

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2d ed. Columbia, 1858.

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For criticisms of the geology of the Survey, see MERRILL, (1), p. 444–46. (See Annot. Bib.)

See also MERRILL (1924 above), p. 323–25.

Leiber was assisted by J. FRIEDMAN.

Contents:

ch. 1 Introductory. p. [1]–16.
  2 General geognostic description of the Districts . . . and their special petrography. p. [17]–39.
  3 Useful minerals. p. [41]–99.
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1860 ———. Report on the survey of South Carolina; being the fourth annual report to the General Assembly. Columbia, S. C., 1860. 9 + 194 p. 4 pl.

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See also MERRILL, G. P., 444–46. (See Annot. Bib.)
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TRANSYLVANIA UNIVERSITY BOTANICAL GARDEN, LEXINGTON, KENTUCKY (1824)

History

"The Legislature of the state of Kentucky having chartered a company for the purpose of establishing a botanical, agricultural and medical garden, in Lexington, as an auxiliary branch of Transylvania University: We, the president and the directors of the said garden, having resolved to put it into immediate operation, take the liberty to request the favor of your co-operation in behalf of this institution.

"We hope that you will hear with pleasure that a botanical garden has been established in the centre of North America, and that you will feel inclined to patronize this new institution which will become instrumental in collecting and spreading the beautiful and useful vegetable productions of this region, particularly since they are all suitable to be cultivated in the open air in the Atlantic and Southern States, Mexico, Europe, etc.

"It is our wish to make at least an annual exchange with you of our mutual productions . . ." From the CIRCULAR of the Directors of the Botanic Garden, p. 2, 4. Signed by W. W. Richardson, president of the board, and C. S. Rafinesque, secretary, May 1, 1824.

Rafinesque was superintendent of the Garden during its short-lived existence. Activity on the Garden was suspended in 1826 in March, after a very active year of constructive work. The original MS documents relating to the Garden are in the Public Library at Lexington, Ky.

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p. 13–5, Estimate of the income and expenses;
p. 15–6, Charter.
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————. First catalogues and circulars of the Botanical Garden of Transylvania University at Lexington in Kentucky, for the year 1824: Premiers catalogues et circulaires du jardin botanique de l'Universite Transylvane a Lexington en Kentucky pour l'annee 1824. Lexington, Ky., Printed for the Botanical Garden Company, by John M. M'Calla, 1824. 24 p.

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Circular of C. S. Rafinesque to his friends and correspondents in America and Europe. p. 4–10.

I. Florula Kentuckensis: Catalogue of the principal trees, shrubs, and plants of Kentucky, either new, rare or peculiar, that are offered to be procured and sent by the Botanical Garden of Lexington. p. 12–6.

II. Catalogue: List of the useful plants, shrubs and trees either medical, tinctorial or economical, wanted for the Botanic Garden of Transylvania University. p. 17–9.

III. Catalogue: Alphabetical list of the ornamental, fragrant or singular plants, shrubs, and trees wanted by the Botanic Garden. p. 20–3.
Remarks. p. 24.

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BOTANIC CLUB OF WASHINGTON, D. C. (1825)

History

"During the spring of the year 1825, after the dissolution of the WASHINGTON BOTANICAL SOCIETY (1817), q.v., a few gentlemen of this city, devoted to the science of botany, formed an association, with an earnest determination to explore and investigate, de novo, the indigenous plants growing in the District of Columbia.

"The Association under the name of the BOTANIC CLUB, consisted of William Mechlin, William Rich, Alexander McWilliams, M.D., the compiler, and during the following year, of James W. Robbins, M.D., but who afterwards during the succeeding year, removed from the District. The Prodromus, herewith submitted to the public, is, so far, the result of their investigations to the present time; and there is no doubt that their contemplated Flora will contain a much more augmented catalogue, more particularly among the species, than is now presented." BRERETON, J. A. 1830. p. 3 (see BIBLIOGRAPHY, below).

See also the BIBLIOGRAPHY under WASHINGTON BOTANICAL SOCIETY (1817), entries 1902, 1917 and 1918, by Messrs Coville, Rathbun and Ricker, respectively. See also that under 1918 by W. L. McAtee.

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WORCESTER LYCEUM OF NATURAL HISTORY (1825)

History

"The WORCESTER LYCEUM OF NATURAL HISTORY was formed in 1825, and made a small collection of minerals, birds, shells and other specimens in natural history, which were deposited in the rooms of the American Antiquarian Society (Amer. J. Sc. v. 18, p. 139, Apr. 1830) about 1830, at which time active efforts for continuing the collecting of specimens was given up . . ."

The founders of the Lyceum were Levi Lincoln, Dr John Green, F. W. Paine, Isaac Davis and Stephen Salisbury.

"The natural history activities in Worcester were revived in April, 1854, when several members of the Worcester Lyceum, who were interested in natural history, projected a plan for having such a department in connection with the Association, i.e., the Library Association, and in May of that year, it was organized by the choice of Rev. E. E. Hale as chairman, with a secretary, treasurer and eight curators who were to be in charge of specimens contributed to the various departments of the cabinet.

"This branch was for many years considered of minor importance, but has now become the main object, and has kept the organization of the present organization alive after the Library and reading-room had been given up . . ." Extracts from the sketch of the Lyceum and the Association in 1876 (see Bibliography, below: 1876).

Thomas Wentworth Higginson says: "In Worcester I did a great deal in the way of field observation, and organized with Hale and others the local Natural History Society . . ." (His Cheerful Yesterdays. 1898. p. 194.)

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See also Jewett's History of Worcester County, Mass. 1879. p. 137–38.

CHESTER COUNTY CABINET OF NATURAL SCIENCE, WEST CHESTER, PA. (1826)

History

"H. H. Van Amringe, Esq. from the Committee appointed to prepare a Report on the progress and condition of the Chester County Cabinet of Natural Science, presented the following which was read, and directed to be published.

"At a meeting of the Cabinet in January last, a committee was appointed to prepare and present to the next stated meeting a report of the progress of the Cabinet, from its foundation to the time of its Report [March 15, 1828]. In discharging this duty, the Committee have deemed it advisable to preface this communication with a sketch of the advances made in Chester County, in the study of natural science, before our Society was organized. They will accompany their remarks with biographical notices of a few of the earliest and most successful cultivators of the science in Chester county, as far as they have been able to collect information . . .

"It does not appear that anything had been done in the science of Zoology in Chester County; but the study of minerals received considerable attention and Botany was cultivated with much interest at an early period. In the year 1774 the late Humphry Marshall established his Botanic Garden at Marshalltown; he applied himself very diligently to the improvement of the place and to the collection of plants especially such as were indigenous to the United States. The Garden soon obtained a reputation; and for many years before the death of Mr Marshall, it had become an object of curiosity to men of science. Mr Frederick Pursh informs us that it was the first place of a botanical character visited by him, after his arrival in America. After the decease of Mr Marshall in 1801, we believe that no improvements were made in the Garden, and since the death of Dr Moses Marshall in 1813, the botany of the place seems to have been entirely neglected . . .

"The next Garden in botanical importance is that founded by the late John Jackson in the township of London-Grove. Mr Jackson was a member of the Society of Friends; he was an excellent gardener and a highly respectable botanist. He was born in London-Grove the 9th of November, 1748 and died in the same township the 20th of December, 1821. The Garden was commenced in the year 1776 or 1777; it contains about an acre and a half of ground, and is located in a limestone valley of extraordinary beauty and fertility; a small greenhouse is attached to the place; a spring yielding an abundant supply of water, takes its rise near the centre of the Garden, and affords an opportunity for the growth of acquatic plants, and some others which delight in a humid soil. The place presents a numerous collection of foreign and indigenous plants of much interest to the student of botany . . .

"Our situation forbids us to enlarge upon the character and botanical acquirements of Dr William Darlington . . . By botanical explorations in the vicinity of West Chester, accompanied with an easy and familiar mode of imparting instruction, he infused a love of natural science into many persons who are now engaged in the study of nature. His persevering exertions contributed in a quiet measure to the formation of our Cabinet and much of the success which has attended our operations is to be ascribed to his ardor in the cause. He deposited his extensive and valuable herbarium in the Cabinet, at the organization of the Society; he assisted also with donations of minerals and in the botanical department, almost everything has been supplied by his skill and labor . . .

"From the above review, it appears that at an early period, considerable knowledge was diffused over Chester County, in relation to natural science, and that many persons had been actively engaged in the study. But no connexion existed to concentrate the efforts, and stimulate the exertions of individuals. In the year 1825, several gentlemen were accustomed to assemble weekly in the vicinity of West Chester to accompany Dr Darlington in his botanical explorations. The associations gradually formed by this means presented a favorable opportunity for instituting a permanent Society, for the cultivation of natural science. In this manner the Chester County Cabinet was produced and having for its object the study of nature and more especially a collection of the materials necessary for a complete natural history of the county. The Society held its first stated meeting March 18, 1826. The number of members is at present twenty-five, and of the correspondents eleven.

"Called into existence under such favorable circumstances, located in a county distinguished for the variety and abundance of its mineral and botanical productions, encouraged and patronized by an intelligent and liberal community, the Chester County Cabinet, from the time of its formation, has progressed rapidly in accomplishing the purposes for which it was instituted . . ." From REPORT on the Progress and President Condition of the Chester Co. Cab. Nat. Sc. 1828. 8 p.

JEWETT, p. 131, 1849, gives the following brief account of the Society at the beginning of the fifties: "It was founded in March, 1826, and incorporated in 1831. Of 450 volumes in the library, 150 are on the natural sciences. In 1836, a three-storey structure was erected for its use; five thousand dollars having been spent on the building. The Hall of the Cabinet is 40′ x 50′ . . . the lower storey is fitted out as a lecture room, with a laboratory in the rear. The third contains the museum and the library . . . It possesses one of the best and most extensive collections of minerals in Pennsylvania; a splendid collection of shells, and of English and American birds; a herbarium of 7,000 species of plants, duly arranged, labelled and catalogued, with various curiosities in nature and art . . ."

William Darlington, the founder of the Cabinet was its president from 1826 to 1862, the year of his death. The first vice-presidents were William Jackson and Isaac Darlington; secretaries were John W. and David Townsend. The curators at various periods were as follows (the dates following the names indicate year the duties were assumed): Henry H. Van Amringe, Isaac Thomas, Abraham Marshall, Jr., (all in 1826); Wilmer Worthington, 1828; John Marshall, 1829; John Hemphill, Jr., 1831; Cheyney Hannum, 1833; Philip P. Sharpless, 1833; J. Lacey Darlington, 1833; Wm. P. Townsend, 1835; W. D. Hartman, 1842; W. W. Jefferis, 1842.

Other prominent workers in the Cabinet were Joel Baily, Edward and Joseph Swift, Caleb Brinton, Jr., A. Hamilton Derrick, Ezra Michener, Isaiah Lukens, Joshua Hoopes, Lewis W. Williams.

In 1869 the properties of the Cabinet and of the West Chester Academy were sold and the proceeds made the basis for a fund to erect the buildings of the State Normal School of the First District.

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Rd March 26, 1835.

Dillingham, William H[enry]. A discourse on the advantages of the study of natural science, delivered by request of the Chester County Cabinet, introductory to their course of lectures, December 5th, 1835 . . . Phila. W. Brown, printer, 1835. 36 p.

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MACLURIAN LYCEUM OF PHILADELPHIA (1826)

History

"In consequence of an increasing taste for scientific pursuits, it was thought advisable to form another institution in this city, which should afford additional facilities for the acquisition of knowledge. With this in view, a Society was established in May, 1826, and in commemoration of the invaluable aid afforded by William Maclure, Esq., to the cultivation of the sciences in this country, we were induced to adopt, entirely unknown to him, the name of the MACLURIAN LYCEUM.

"It was designed to include within its range, all the natural and physical sciences, together with those arts most immediately connected with them; to institute regular courses of lectures, to publish a journal, and by holding frequent meetings facilitate the interchange of scientific information. As indispensable auxiliaries, a library, museum, and philosophical apparatus were commenced to which valuable additions have already been made." From its CONTRIBUTIONS. v. 1, no. 1, p. 1. 1827.

Its only president during the brief career of the Lyceum was Thomas Say. Its vice-presidents were C. L. Bonaparte and Jacob Gilliams. Its curators were Samuel Hufty, George L. Johnson, John Hewitt, and Frederick Fraley, for 1826. In 1827, Thomas Wardle and Jacob Jeans were added; and in 1829, William M. Muzzey, John C. Trautwine and John L. Lewis were added.

Courses in botany were given by Samuel Freedley, M.D., during June, July and August, 1826. General lectures on the various natural history topics were delivered at intervals by J. T. Sharpless, Jacob Jeans and Caleb B. Mathews. Benjamin M. Hollinshead presented his herbarium to the Lyceum.

The Lyceum published its prcoeedings in the CONTRIBUTIONS OF THE MACLURIAN LYCEUM, of which three numbers appeared between 1827 and 1829 (see below). In January, 1830, John T. Sharpless presented a report showing what the Lyceum had done for four years from 1826–1830.

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GREEN, Jacob. An account of some new species of Salamanders. C. v. 1, no. 1, p. 3–8, 2 pl. Rd Oct. 23.

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362 species enumerated. Part of a paper rd before N. Y. Lyc. Nat. Hist. (1817), Jan. 24, 1826. In its Annals. v. 2, p. 7–126.

1827 SAY, Thomas. Remarks on some Reptilia described by Richard Harlan, M. D., in the Journal of the Academy of Natural Sciences of Philadelphia. C. v. 1, no. 2, p. 37–8. Rd April 23.

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TROOST, Gerard. On pyroxene. C. v. 1, no. 2 & 3, p. 51–60, 61–6. Rd April 23.

GREEN, Jacob. Reply to a note in Harlan's "Synopsis of American Reptiles." C. v. 1, no. 2, p. 39–41. Rd May 14.

————. Description of two new species of Achatina, from the Sandwich Islands, with some remarks on the Ti, the plant on which these shells are commonly found. C. v. 1, no. 2, p. 47–50, 1 pl. Rd May 14.

1828 SAY, Thomas. Description of new species of Hymenoptera of the United States. C. v. 1, no. 3, p. 67–83. Rd March 3.

GREEN, Jacob. Remarks on the Achatina Stewartii. C. v. 1, no. 3, p. 66–7. Rd Sept. 29.

DELAWARE ACADEMY OF NATURAL SCIENCES. WILMINGTON, DELAWARE (1827)

History

"The Delaware Academy of Natural Sciences has within a few months been established at Wilmington. They are pursuing the same course as the Chester County Cabinet of Natural Sciences (1826), q.v., in collecting the natural productions of the country and have already a good collection of the minerals which have as yet been discovered in the state and vicinity. They possess some active and zealous members who will no doubt exalt the institution, increasing the means of its usefulness and prosperity." G. W. CARPENTER, in Amer. J. Sc. v. 14, p. 3 (ftnote). April, 1828.

" . . . We learn with pleasure that the Wilmington Academy exhibits in its hall a valuable collection in natural history and especially in mineralogy. These collections are said to be increasing and that a growing disposition, favorable to the cultivation of science is manifested more especially by the younger portion of the citizens of Wilmington . . ." From the Amer. J. Sc. v. 24, p. 177. Apr. 1833.

Dr William Gibbons was president of the Academy for many years. In 1833, Henry Gibbons delivered an address on the progress of the study of the natural sciences in Wilmington. The Academy was incorporated in 1836 by the following men: William Gibbons, Willard Hall, Eli Hilles, E. W. Gilbert, Edward Tatnall, Alfred Dupont, Ziba Ferris, Henry Gibbons, Benjamin Webb, W. W. Baker, J. S. Naudain, and Jacob Alrichs. The Academy maintained an active existence until the early forties when some of its collections were merged with the Botanical Society of Wilmington (1842), q.v.

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THE WESTERN JOURNAL OF THE MEDICAL AND PHYSICAL SCIENCES, CINCINNATI (1827)

History

The WESTERN MEDICAL AND PHYSICAL JOURNAL made its first appearance in April, 1827, and was the second scientific and medical periodical to be published west of the Alleghanies; (the first having been the WESTERN QUARTERLY REPORTER OF MEDICAL, SURGICAL, AND NATURAL SCIENCE (1822), q.v.). Only one volume, in monthly numbers, was published under this title.

With volume 2, the name was changed to the WESTERN JOURNAL OF THE MEDICAL AND PHYSICAL SCIENCES, still appearing as a monthly. With v. 3, it appeared as a quarterly. In all 12 volumes were published. It served as the occasional organ for the publication of the proceedings of, and papers read before, the WESTERN ACADEMY OF NATURAL SCIENCES, CINCINNATI (1835), q.v. J. L. Riddell's contributions to botany form the chief contributions of the journal to natural history.

In its Prospectus to v. 1, April, 1827, pref. p. 12, the following note refers to its intentions with respect to advancing the cause of natural history: "The natural history of the Mississippi States is a subject of interest, both in a professional and a national point of view; and as there is not in this region, any magazine devoted to the physical sciences, the editors will be gratified to receive . . . and make public, all kinds of original facts and observations on the climate, mineralogy, botany, and zoology of the states which lie between the Lakes and the Gulph of Mexico."

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v. 2, pub. monthly.
v. 3–12 pub. quarterly.

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1828 **v. 2, no. 3, June**

DRAKE, Daniel. Notices of the principal mineral springs of Kentucky and Ohio. art. 4, p. 142–67.

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RIDDELL, J. L. Observations on the geology of the central parts of the state of Ohio. art. 6. p. 356–68.

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THE TRANSYLVANIA JOURNAL OF MEDICINE AND THE ASSOCIATE SCIENCES, LEXINGTON, KY. (1828)

History

In a Prospectus dated December 1, 1827, the publication of the TRANSYLVANIA JOURNAL OF MEDICINE AND THE ASSOCIATE SCIENCES, was announced. It was published at Lexington, Ky., and the first number made its appearance in February, 1828. It appeared quarterly thereafter. Twelve volumes, with various changes of editors, were published between 1828 and 1839. The set is a very rare one.

The Transylvania Journal constituted practically the only outlet for the botanical studies of Charles Wilkins Short, one of the editors of the Journal, and at the time, Professor of Botany and

Materia Medica at the Transylvania University, in Lexington.

The set, analyzed below, was examined at the Library of the New York Academy of Medicine.

Bibliography

1828 (The) TRANSYLVANIA JOURNAL OF MEDICINE AND THE ASSOCIATE SCIENCES; ed. by John Esten Cooke, and Charles Wilkins Short. Lexington, Printed by Joseph G. Norwood, 1828–39. 12 v.

v. 1–4	ed. by Cooke & Short.
v. 5–9	ed. by L. P. Yandell.
v. 10	ed. by Robert Peter.
v. 11	ed. by John Eberle, Short, Peter, & Medical Faculty of Transylvania Univ.
v. 12	ed. by T. D. Mitchell.

v. 11 contains only 2 nos. & v. 12, only one no. Jan.-March, 1839.

Papers on Natural History

1828 **v. 1, no. 1–4, Feb., May, Aug., Nov.**

Short, C. W. Prodromus florulae Lexingtoniensis, secundum florendi aetatem digestae; or, A descriptive catalogue of the phaenogamous plants indigenous to this portion of Kentucky, arranged in the order of their periods of flowering.

no. 1, art. 4, p. 92– 9.
2, art. 10, p. 250–65.
3, art. 6, p. 407–22.
4, art. 8, p. 560–75.

Cont. in v. 2, no. 3, (below. q.v.)

1829 **v. 2, no. 2, May.**

Caldwell, Charles. Thoughts on the moulting of birds. art. 5, p. 209–18.

v. 2, no. 3, August.

Short, C. W. Prodromus florulae Lexingtoniensis . . . (cont.) art. 9, p. 438–53.

Previous parts in v. 1, no. 1–4 (above, q.v.)

v. 2, no. 4, November.

————. On the cultivation of certain medicinal plants. art. 5, p. 512–23.

1830 **v. 3, no. 1, February.**

Caldwell, Charles. Thoughts on generation. art. 2, p. 47–79.

1831 **v. 4, no. 1, February.**

Short, C. W., and Eaton, H. H. Notices of western botany and conchology. art. 4, p. 69–82.

v. 4, no. 4, November.

TROOST, Gerard. Address delivered before the Legislature of Tennessee at Nashville, October 19, 1831, on the mineralogy and geology of Tennessee. art. 2, p. 491–507.

Repr. from the "Nashville Banner".

See also TENNESSEE Geol. Surv. (1831).

SAY, Thomas. Descriptions of several new species of shells, and of a new species of Lumbricus (terrenus). art. 6, p. 525–29.

Repr. in Conchological Writings of T. S. N. Y. 1858. p. 149–60.

1832 **v. 5, no. 1, March.**

EATON, H. H. Description of a few species of plants from the vicinity of Troy, N. Y. art. 6, p. 102–10.

Written Mar. 17, 1832.

v. 5, no. 3, September.

RAMSEY, J. G. M. An essay on the medical topography of East Tennessee. art. 2, p. 363–75.

YANDELL, L. P. An account of some of the principal mineral springs of Kentucky. art. 3, p. 375–401.

1833 **v. 6, no. 1, March.**

SHORT, C. W. Instructions for the Gathering and preservation of plants for herbaria . . . in a letter to a young botanist . . . art. 3, p. 59–74.

Also pub. as a separate, Lexington, Ky., Printed by Julius Clarke, 1833. 16 p. Abstr. in Adv. Sc. & Annals Nat. Hist. (1834), v. 1, no. 2, p. 88–99. Sept. 1834.

v. 6, no. 4, December.

SHORT, C. W., PETER, Robert, and GRISWOLD, H. A. A catalogue of the native phaenogamous plants and ferns of Kentucky. art. 3, p. 490–501.

Cont. in v. 7, no. 4 (below, q v.)

1834 **v. 7, no. 1, March.**

PETER, Robert. On the mode of collecting and preserving objects of natural history, with a view to the formation of a cabinet and their transportation. art. 9, p. 133–49.

Rd before Med. Soc. Lexington, Ky., which contemplated forming a Museum.

v. 7, no. 4, December.

SHORT, C. W., and PETER, Robert. A supplementary catalogue of the native phaenogamous plants and ferns of Kentucky. art. 8, p. 598–600.

Pt. 1 in v. 6, no. 4 (above, q.v.) & cont. in v. 8, no. 4, (below, q.v.)

1835 **v. 8, no. 1, March.**

SHORT, C. W. Remarks on the nomenclature of botany. art. 5, p. 70–86.

Rd before Med. Soc. Lexington, Ky., Jan. 2, 1835.

v. 8, no. 2, June.

Peck, Clarendon. Notes on the progress of vegetation, or blooming of plants, at Sicily Island, Catahoulah Parish, Louisiana, from the 10th of December to the 14th of May, 1833–34. art. 3, p. 207–9.

v. 8, no. 3, September.

Peter, Robert. Notice of the Crab Orchard mineral springs. art. 3, p. 408–14.

v. 8, no. 4, December.

Short, C. W. Bibliographia botanica; a notice of some of the more recent works on American botany. art. 8, p. 553–74.

Contains brief introduction to the history of botany in U. S. Elaborated in his art. in v. 9, no. 2, (below, q.v.)

Short, C. W., and Peter, Robert. A supplementary catalogue of the native phaenogamous plants and ferns of Kentucky. art. 9, p. 575–82.

Cont. in v. 10, no. 3, (below, q.v.) See previous catalogue in v. 7, no. 4, (above, q.v.)

1836 **v. 9, no. 2, August.**

Short, C. W. A sketch of the progress of western botany. art. 12, p. 324–50.

1837 **v. 10, no. 3, September.**

———. A third supplementary catalogue of the plants of Kentucky. art. 6, p. [435–40.]

Pages wrongly numbered 336–40. Written July 17, 1837.

BOSTON SOCIETY OF NATURAL HISTORY (1830)

History

"In the winter of 1830, a few gentlemen of scientific attainments conceived the design of forming a Society in Boston, for the promotion of natural history. After several preliminary meetings, and communicating their designs to others who they supposed would be favorably disposed towards them, a meeting was called on the 28th of April, 1830. It was then organized by the choice of Dr Walter Channing as Moderator, and Theophilus Parsons, Esq., as Secretary. They then resolved to form themselves into a Society under the name of the BOSTON SOCIETY OF NATURAL HISTORY. On the 6th of May, a Constitution and By-Laws were adopted; and on the 13th of the same month, officers were chosen. An Act of Incorporation was obtained at the next session of the Legislature, and bears the date of Feb. 24, 1831.

"The great object had in view in the formation of the Society was to promote the taste, and afford the facilities for the pursuit of natural history by mutual co-operation, and the collection of a cabinet and library. But it has always been understood that especial attention should be given to the investigation of the objects in our own immediate vicinity.

''The officers of the Society are a President; two vice-presidents, corresponding and recording secretaries, treasurer, librarian, eight curators, and a cabinet-keeper. These officers constitute a council on which devolves the management of the business concerns of the Society. These are chosen annually by ballot, on the first Wednesday in May.

''Thomas Nuttall, the well-known botanist and ornithologist was chosen the first president, but as he regarded himself as only a transient resident in Boston, he declined the office . . .

''It is not a requisite for membership, that a person should be practically engaged or immediately interested in the study of natural history. Any person who is willing to contribute to the support of the Society, either from personal interest or because he regards it as an institution calculated to conduce to the public good, may become a member . . . The consequence is, that the whole number of immediate members is very great. The privileges of the members are, free access to the Cabinet at all times on application to any member of the Council—the use of the Library and the admission to all lectures given in the name of the Society . . .

''1) MEETINGS. Regular meetings are held on the afternoons of the first and third Wednesdays of each month. . . . At these meetings, the business of the Society is transacted, scientific communications are heard, and donations are received . . .

''2) LECTURES. In the early days of the Society, it was deemed that one of the most direct modes to call public attention to the subject would be to procure courses of lectures. Accordingly, four courses of lectures on various subjects connected with natural history, were given. These were mostly given by original members of the Society . . .

''3) PUBLICATIONS. Soon after the Society went into operation, a periodical publication was commenced under the title of the Boston Journal of Natural History . . .

''The Society has also published and distributed gratuitously, the discourse given at annual meetings, by Dr Walter Channing, Rev. H. Winslow, and J. E. Teschemacher, Esq. Arrangements have also, been made to publish an abstract of the doings of the meetings in a form to be extensively and promptly circulated, as is now done by most other scientific bodies.

"4) THE FORMATION OF A CABINET. This was naturally the first object to which the attention of inexperienced naturalists would be turned. Any one may be a collector, though he may not enter upon the intimate study of natural productions, and can thus gather the materials on which others may labor. Consequently, a collection was formed with a rapidity equivalent to the zeal of a newly formed Society with numerous members. The nucleus of the Cabinet consisted of a collection of about 1,000 species of shells, deposited by Amos Binney, and the geological and mineralogical collection of Dr C. T. Jackson, second in completeness to no other cabinet in America.

"Not long after this, a very important addition was made by J. N. Reynolds, of his collection made during a visit to the Antarctic Seas and S. America, comprising upwards of 400 birds' skins, numerous plants, shells, minerals, organic remains, insects, eggs, etc. Another large addition was made by J. P. Couthouy, who on joining the Exploring Expedition, generously placed in the Society's cabinet about 800 species of choice shells. Around these clustered rapidly other birds, fishes, reptiles, insects, skeletons and plants. Some of the principal objects in the Hall are, the skeleton of an elephant, rhinoceros, Galapagos tortoise, Cape ground-hog, ostrich . . .

"In the Department of Mammalia, there are skeletons and parts of skeletons, and a few stuffed skins of 200 animals; birds, about 450 skins, of which only 100 are mounted, with about 50 nests and 200 eggs; of fishes, about 400 species, including a nearly complete suite of the fishes of Massachusetts; reptiles, 150 specimens embracing all those of this state. Insects not less than 4,000 species and more especially valuable from comprising the collection, with the Journal, made by Prof. Hentz, and the labor bestowed upon their arrangement by Dr T. W. Harris, who is now unquestionably at the head of entomology in America; shells, about 4,000 species arranged in a very convenient manner and mostly labelled—minerals, 800 specimens in addition to the collection of Dr C. T. Jackson and the collection of rocks, minerals, and soils made by Prof. Edward Hitchcock, illustrating the mineralogy and geology of the state; Crustacea, 150; Plants, 5,000, partially arranged with numerous specimens of wood and fruits—and the collection of corals and radiated animals are very respectable.

"The cabinet of Dr Jackson has not yet become the property of the Society, but in the course of the last year Mr Binney offered to relinquish to the Society all claim to the collection of shells, deposited by him, provided other gentlemen, who had collections, would contribute such shells as they might have, which were not in the Society's cabinet, or such as would materially improve upon the specimens already possessed. This proposition was readily assented to and in consequence about a thousand species were added from the Cabinets of Rev. F. W. P. Greenwood, G. B. Emerson, Esq., J. J. and E. S. Dixwell, Esquires, Dr D. H. Storer, A. A. Gould, T. J. Whittemore, John Warren and Stephen Emmons; so that the entire collection of shells is now the property of the Society.

"5) EXHIBITIONS. It has been the policy of the Society to discountenance anything like exclusive privileges and to make as available as possible any advantages to be derived from its operations. It was early decided that no fees should be received from visitors to the Cabinet and for several years the room has been opened, for the free admission of any persons, whether young or old, on Wednesdays, from twelve to two o'clock. It has been a favorite resort of the curious and inquisitive at those periods. Every one seems to respect the liberty given him, and scarcely has an instance been known of an article having been removed or damaged which has not been promptly replaced. Many donations are obtained from persons visiting the collection and a taste for natural productions is thus widely diffused.

"6) FORMATION OF A LIBRARY. When the Society originated, the great difficulty in the way of making advances in the study of natural history, was the want of books. No one possessed more than a few volumes on some subject to which he might have given his individual attention. The importance of forming a library was at once felt; and most of these scattered volumes have been collected until there are now about 1,000 volumes in the Library . . . It is gratifying to be able to record the liberal donations of Charles Amory, B. D. Greene, John Davis, Simon E. Greene, Amos Lawrence, S. A. Eliot, David Eckley, G. B. Emerson, Wm. Ingalls, G. C. Shattuck, George Parkman, N. M. Hentz, James Jackson, Francis C. Gray, John Randall, Horace Gray, Jonathan Phillips and David Henshaw, Thomas H. Perkins . . .

"When we consider how essential a Library is to the study and arrangement of every department of the Cabinet, it cannot but be felt that the members have done wisely to contribute largely toward it. It is of vital importance that the naturalist, who is engaged in the investigation of any subject, should be able to know all that has been written on his subject. Scientific books are expensive, and no man among us can promise himself such a library as he may need. It is the part of wisdom and interest, therefore, to collect the volumes, which are scattered here and there, into the common stock. They will thus be more vastly useful than when shut up in private libraries.

"FINANCES. Until quite recently the only resources of the Society have been the proceeds of lectures and the annual assessments. The former were nearly adequate to cover the expenses of the furniture of the hall and the show-cases . . .

"In the year 1835, the Legislature of Massachusetts, in appropriating money in aid of various institutions for the furtherance of education, voted the Boston Society of Natural History $300 per annum for five years. And in 1840, Simon E. Greene, in addition to his library and collection of shells and minerals, bequeathed five hundred dollars in money for the general purposes of the Society.

" . . . In addition to the influences of the Society upon the community in behalf of natural science through its lectures, its cabinet, its library and its journal, it may truly be said, that the ZOOLOGICAL AND BOTANICAL SURVEY OF THE STATE (1837), q.v., in connection with the GEOLOGICAL SURVEY OF MASSACHUSETTS (1830), q.v., was mainly devised, obtained and executed by its Council. The result of this survey is such as to reflect honor upon the liberality of the state which ordered it and the science of the Commissioners who performed it . . ." The whole account given above is reprinted from GOULD, A. A. 1842. p. 236–41 (see Bibliography, below, 1842).

In May, 1834, the first number of the first volume of the JOURNAL (see below the Dates of Publication), was published; and until 1863, seven volumes were issued. A new series of the Journal entitled the MEMOIRS was begun in December, 1863, and has been continued to date. The first volume of its PROCEEDINGS was issued 1841–1844, and has been continued to date. Ten volumes were published before the close of the Civil War. Abstracts of the Proceedings of the Society were published in the AMERICAN JOURNAL OF SCIENCE (1818), q.v., for the years 1838–1840 (see below PROCEEDINGS: Dates of Publication; & PROCEEDINGS: Abstracts).

In May, 1857, Prof. J. W. Bailey bequeathed to the Society his great microscopic collection of algae, infusoria, etc., with all the books in his library. A report of this bequest may be found in the Proc. v. 6, p. 179–80, 194–200, June & July, 1857.

In 1864, the new Hall of the Society was dedicated. It was erected at an expense of $100,000 and was in its day one of the finest buildings of the kind. A Report of the meeting in the hall of the new museum building on June 3, 1864, may be found in the Proc. v. 10, p. 43–7, Nov. 1865. A description of the contents of the Museum at that time is given in the same volume, p. 118–41, Feb. 1866.

In 1865, the Society instituted its well-known Walker prizes in natural history, an account of which may be found in the Amer. J. Sc. v. 90 (ser. 2, v. 40), p. 137–38. July, 1865.

In 1862, Benjamin Daniel Greene, the first President of the Society bequeathed the sum of $9,000 to the Society.

A comprehensive history of the Society from its inception to the close of the first-half-century will be found in the article by BOUVE below (in the BIBLIOGRAPHY, 1880).

Below are given 1) The names of the presidents of the Society to 1865, the first vice-presidents and the corresponding secretaries; 2) Dates of the Publication of the JOURNAL, PROCEEDINGS, AND MEMOIRS, published through 1865; 3) PAPERS ON NATURAL HISTORY, giving a chronological record, with notes, of the papers read before the Society, from its foundation to the close of 1865, as recorded in the scientific organs of the Society noted above.

Nearly all the active contributors to the Society's publications served as Curators of some department in the Society. Among those who did not contribute papers, but served as Curators of the Society at one time or other (For comprehensive list, see BOUVE), were: Francis C. Gray, Walter Channing, Edward Brooks, Jos. W. McKean, J. S. Copley Greene, Joshua B. Flint, William B. Fowle, Clement Durgin, G. W. Otis, James C. White, John Green, Marshall S. Scudder, Seth Bass, Charles K. Amory, Estes Howe, William I. Bowditch, Henry J. Bowditch, Henry J. Bigelow, C. C. Sheafe, Henry K. Oliver, Jr., A. E. Belknap, William Read, Arthur T. Lyman, Nathan Farrand, John P. Reynolds, B. Joy Jeffries, William T. Brigham.

Its librarians were Seth Bass, Charles K. Amory, Ezra Dillaway, John Weston, Jr., James Dixwell and Patrick T. Jackson, Jr.

Presidents of the Society

1830	May 13 –Aug. 9	Thomas Nuttall (Did not accept)
1830–37	Aug. 9, '30–May 3, 1837	Benjamin D. Greene
1837–43	May 3, '37–May 17, 1843	George B. Emerson
1843–47	May 17, '43–May 5, 1847	Amos Binney
1847–56	May 5, '47–May 4, 1856	John Collins Warren
1856–70	June 18, '56–May 4, 1870	Jeffries Wyman

Other Officers

Vice-President—	George Hayward,	May 13, 1830–May 12, 1832
	John Ware,	May 12, 1832–May 4, 1836
	F. W. P. Greenwood,	May 4, 1836–May 5, 1841
	Amos Binney,	May 5, 1841–May 17, 1843
	C. T. Jackson,	May 17, 1843–May 6, 1874
Corres. Sec.—	Gamaliel Bradford,	May 13, 1830–May 7, 1834
	Amos Binney,	May 7, 1834–May 3, 1837
	Epes S. Dixwell,	May 3, 1837–May 17, 1843
	A. A. Gould,	May 17, 1843–May 1, 1850
	J. Elliot Cabot,	May 1, 1850–June , 1853
	S. L. Abbot,	Nov. 2, 1853–May 3, 1876

Bibliography

1833 GREENWOOD, F[rancis] W[illiam] P[itt]. . . . Address . . . (In Bost. Soc. Nat. Hist. Jour. v. 1, no. 1, p. 7–12. May, 1834)

Rd Aug. 21, 1833. General account of the formation of the Society at the opening of their new hall in Tremont St.

1834 BOSTON SOCIETY OF NATURAL HISTORY. Boston Journal of Natural History, containing papers and communications read to the . . . published by their direction. Boston, [1834]–63. 7 v. illus. pl.

For dates of Publication of the various parts of the Journal, see below.

1837 ————. Catalogue of the Library . . . Boston, 1837. (In Bost. Soc. Nat. Hist. Jour. v. 1, no. 4, p. 497–512. May, 1837).

————. Annual report of the curators of the . . . , read May 1, 1837. (In Amer. J. Sc. v. 32, no. 2, p. 364–71. July, 1837).

Reported by D. H. Storer.

1841 ————. Proceedings of the . . . Boston, 1841–date. v. 1–date.

For the dates of the publication of the 10 volumes issued before the close of the Civil War, see below.

1842 GOULD, A[ugustus] A[ddison]. Notice of the origin, progress and present condition of the Boston Society of Natural History. Boston, Feb., 1842. (In Amer. Quart Register. v. 14, no. 3, p. 236–41).

A reprint of this is given above under ''History''.

1845 [BINNEY, Amos]. Remarks . . . showing the origin and history of the Society, its influence on the cultivation of the natural sciences in New England, its present condition and wants, and its claims upon the liberality of the public, by the President. Boston, Freeman & Bolles, 1845. 16 p.

1853 WARREN, John C[ollins]. Address to the Boston Society of Natural History. Bost. Printed by John Wilson & son, 1853. 48 p.

''Account of the formation and development of the study of natural history in this part of the country''—PREFACE.

1855 BOSTON SOCIETY OF NATURAL HISTORY. Constitution and by-laws . . . with a list of the members. Boston, 1855. 27 p.

1861 ————. Objects and claims of the Boston Society of Natural History, prepared by direction of the Society, at the request of the Committee of associated institutions of science and art, January 1, 1861. Boston, 1861. 35 p. plan.

1865 ————. Conditions and doings of the Boston Society of Natural History, as exhibited by the annual reports of the custodian, treasurer, librarian and curators, May, 1865. Boston, 1865. 54 p.

Repr. from its Proc. v. 10. Reports of these officers were given annually in the Proceedings.

1866 ————. Memoirs read before the Society, being a new series of the Boston Journal of Natural History. Boston, 1866 (1863)–date. v. 1–date. 4.°

Pt. 1 of v. 1, issued Dec. 1863, although title-page of volume reads 1866–69.

1869 ————. Occasional papers. Boston, 1869–date. v. 1–date.

1876 BOUVÉ, Thomas Tracy. . . . Some reminiscences of earlier days in the history of the Society. (In Bost. Soc. Nat. Hist. Proc. v. 18, p. 242–50. Mar. 1876).

1880 ————. . . . Historical sketch of the Boston Society of Natural History; with a notice of the Linnaean Society which preceded it. Boston, 1880. (In Bost. Soc. Nat. Hist. Anniversary Memoirs: 1830–1880. p. 14–250, 32 pl. 9 port.)

The Linnaean Society of New England (1814), q.v. is treated on p. 3–14. The history of the Bost. Soc. Nat. Hist. for 1830–1870 is on p. 14–140. Officers, complete list, p. 244–48.

Decade I, 1830–40, on p. 14– 36.
II, 1840–50, p. 36– 56.
III, 1850–60, p. 56– 81.
IV, 1860–70, p. 81–140.
V, 1870–80, p. 140–243.

Journal (J)

Dates of Publication

v. 1, 1834–1837, pub. 1837, 536 p. 21 pl. col sect.
  no. 1, May, 1834, art. 1–7, p. [1]–68, pl. 1–6.
  no. 2, May, 1835, art. 8–12, p. [69]–208, pl. 7,
  no. 3, May, 1836, art. 13–16, p. [209]–360, pl. 8.
  no. 4, May, 1837, art. 17, p. [361]–536, pl. 9–21.
v. 2, 1838–1839, pub. 1839, 2 + 570 p. 8 pl.
  no. 1, Feb. 1838, art. 1–6 p. [1]–128, pl. 1–4.
  no. 2, Feb. 1839, art. 7–11, p. [129]–288, pl. [5].
  no. 3, } Aug. 1839, art. 12, p. [289]–570, pl. 6–8.
  no. 4, }
v. 3, 1840–1841, pub. 1841, 2 + 532 p. 29 pl.
  no. 1–2 Jan. 1840, art. 1–5, p. 1–280, pl. 1–3.
  no. 3, July, 1840, art 6–13, p. 281–404, pl. 4–20.
  no. 4, Nov. 1840, art. 14–18, p. [405]–532, pl. 21–29.
v. 4, 1843–1844, pub. 1844, 4 + 512 p. 24 pl.
  no. 1, Jan. 1842, art. 1–12, p. 1–162, pl. 1–7.
  no. 2, Sept. 1842, art. 13–22, p. 163–264, pl. 8–11.
  no. 3, April, 1843, art. 23–30, p. 265–376, pl. 12–16.
  no. 4, Jan. 1844, art. 30–43, p. 377–512, pl. 17–24.
v.5 1845–1847, pub. 1847, 6 + 505 p. 39 pl. (Irregular).
  no. 1, Jan. 1845, art. 1–10, p. 1–136, pl. 1–9.
  no. 2, Oct. 1845, art. 11–21, p. 137–296, pl. 10–24.
  no. 3, June, 1846, art. 22–33, p. 297–416, pl. 25–39.
  no. 4, Dec. 1847 art. 34–38, p. 417–505, pl.
v. 6, 1848–1857, pub. 1857, 555 + 13 p. 26 pl.
  no. 1, Oct. 1848, art. 1 –11, p. 1 –140, pl. 1–5.
    Mar. 1849, p. 49 – 64.
    Sept. p. 65 –120.
    Dec. p. 121– 28.
    Jan. 1 1850, p. 129– 40.
  no. 2, Jan. 1850, art. 12–15, p. 141–296, pl. 6–12.
    Oct. p. 245– 96.
  no. 3, April, 1852, art. 16–24, p. 297–408, pl. 13–16.
    May p. 313– 20.
    June p. 321– 68.
    Oct. 1853, p. 369–408.
  no. 4, Aug. 1854, art. 25–28, p. 408–555, pl. 17–26.
    Nov. p. 433– 43.
    Apr. 1857, p. 444–555.

v. 7,		1859–1863, pub. 1863, 4 + 649 p. 15 pl.		
no. 1,	[Nov.]	1859,	art. 1,	p. 1 –208, pl. 1–6.
no. 2,	Sept.	1860,	art. 2– 4,	p. 209–328.
	Dec.			p. 235– 60.
	Jan.	1861,		p. 261–328.
no. 3,	July,	1861,	art. 5– 8,	p. 329–480, pl. 7–11.
	Aug.			p. 353– 84.
	July,	1862,		p. 385–408.
	Nov.			p. 409– 80.
no. 4,	Jan.	1863,	art. 9–17,	p. 481–649, pl. 12–15.
	Feb.			p. 513– 30.
	Mar.			p. 531– 66.
	Apr.			p. 567–649.

Memoirs (M)

v. 1,	1863–1869, pub. 1866–69, 603 p. 24 pl.		
pt. 1,	Dec. 1863–July, 1864,	art. 1,	p. 1 –130, pl. 1–4.
	Dec. 1863–Nov. 1865,		p. 46 – 80.
	Feb. 1866		p. 81 –130.
pt. 2,	Apr. 1866, (& Nov.)	art.	p. 131–303, pl. 5–8.
	Dec.		p. 173– 92.
	May, 1867		p. 193–303.
pt. 3,	Feb. 1868	art.	p. 304–472, pl. 9–15.
pt. 4,	Mar. 1869		p. 473–603, p 16–24.

Abstracts of Proceedings

For the years 1838, 1839, and 1840, an Abstract of the Proceedings appeared in the AMERICAN JOURNAL OF SCIENCE (1818), as follows:

For	In
1838, June–August	v. 36, no. 2, p. 379–93. July, 1839 (by A. A. Gould).
1838, Sept. 19–1839, Mar. 21	v. 37, no. 2, p. 391–97. Oct. 1839 (by Jeffries Wyman)
1839, June–December	v. 38, no. 1, p. 193–98, 391–96. Dec. 1839 & Mar. 1840 (by Wyman).
1840, January–April	v. 39, p. 182–89, 373–80. June & Sept. 1840 (by Wyman).
1840, May 20–1841, Jan. 20	v. 40, p. 386–90. Mar. 1841.

Proceedings (P)

	Dates of Publication.
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1833 Jackson, C. T., and Hayes, A. A. A description of a new mineral species (Ledererite) from Nova Scotia, by C. T. Jackson; with a chemical analysis, by A. A. Hayes. Rd July 7.

In Amer. J. Sc. (1818), v. 25, no. 1, p. 78–84. Oct. 1833.

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1834 Bachman, John. Remarks in defence of the author of the "Birds of America." J. v. 1, no. 1, art. 2, p. 15–31. Rd Feb. 5.

Lewis, Winslow, Jr. Description of a Gibbon. J. v. 1, no. 1, art. 3, p. 32–40, 2 pl. Rd in March.

Gould, A. A. On the Cicindelae of Massachusetts. J. v. 1, no. 1, art. 4, p. 41–55. Rd Mar. 19.

Jackson, C. T. An account of the Chiastolite or Macle of Lancaster. J. v. 1, no. 1, art. 5, p. 55–62, 1 pl. Rd April 2.

Curtis, M. A. Enumeration of plants growing spontaneously around Wilmington, N. C., with remarks on some new and obscure species. J. v. 1, no. 2, art. 8, p. 82–141. Com. Sept. 3.

Assisted by James F. McRee.

Eights, James. Description of a new animal belonging to the Arachnides of Latreille; discovered in the sea along the shores of the New South Shetland Islands. J. v. 1, no. 2, art. 11, p. 203–6, 1 pl. Com. Sept. 17.

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Cont. in J. v. 3, art. 11 & 14. Pub. July & Nov. 1840 (q.v.)

1835 Harris, T. W. Upon the economy of some American species of Hispa. J. v. 1, no. 2, art. 9, p. 141–51, illus. Rd Feb. 18.

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See note to next entry.

————. Descriptions of new species of North American Hymenoptera and observations on some already described. J. v. 1, no. 3 & 4, art. 13 & 17, p. 209–305, 361—416. Com. in Feb.

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Jackson, C. T. Chemical analysis of Chrysocolla from the Holquin copper mines, near Gibara, Cuba. J. v. 1, no. 2, art. 12, p. 206–8. Rd May 6.

————. Chemical analysis of three varieties of bituminous coal, and one of anthracite. J. v. 1, no. 3, art. 16, p. 357–60. Rd Dec. 6.

1836 Storer, D. H. An examination of the "Catalogue of the marine and fresh water fishes of Massachusetts, by J. V. C. Smith, M. D.," contained in Prof. Hitchcock's "Report on the Geology, Mineralogy, etc. of Massachusetts." J. v. 1, no. 3, art. 15, p. 347–56, 1 pl. Rd Mar. 16.

See also Massachusetts Geol. Surv. (1830).

Hitchcock, Edward. Sketch of the geology of Portland and its vicinity. J. v. 1, no. 3, art. 14, p. 306–47, illus. col. sect., map. Com. Apr. 6.

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Couthouy, J. P. Description of a new species of the genus Marginella (Lam.), with some observations upon the same. J. v. 1, no. 4, art. 21, p. 440–43, illus. Rd Oct.5.
M. storeria.

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1837 Storer, D. H. Description of a new species of the genus Gasterosteus (Mainensis). J. v. 1, no. 4, art. 23, p. 464–65. Rd. Jan. 17.

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Teschemacher, J. E. Notice of three species of Trillium, found in the vicinity of Boston. J. v. 2, no. 1, art. 4, p. 112–22, 1 pl. (10 fig.) Rd Dec. 4.

1838 Storer, D. H. Description of a new species of Nucula from Massachusetts Bay. J. v. 2, no. 1, art. 5, p. 122–25, illus. Rd Jan. 1.
N, Thraciaeformis.

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Teschemacher, J. E. . . . Report on specimens of plants from Illyria, sent to him by Dr Tommasini. P. v. 1, p. 5–6. Rd Feb. 3.

Gould, A. A. Results of investigations concerning the Testacea of Massachusetts. P. v. 1, p. 6–7. Rd Feb. 3.

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Pt. 1 rd Dec. 5, 1838 (above, q.v.) Abstract in P. v. 1, p. 13. Cont. pub. Jan. 1845 (below, q.v.)

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*McCulloch, Thomas, Jr. On the importance of habit as a guide to accuracy in systematical arrangement, illustrated in the instance of the Sylvia petechia of Wilson, and all subsequent writers. J. v. 4, no. 4, art. 33, p. 406–10. Rd July 19.

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1846 ALGER, Francis. Notices of new localities of rare minerals, and reasons for uniting several supposed distinct species. J. v. 5, no. 3, art. 22, p. 297–309. Rd Jan. 7.

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Cont. rd Jan. 6, 1847 (below, q.v.)

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Forshey, C. G. 1) On the Cicada septendecim of 1835 in Louisiana. P. v. 2, p. 162–63. Rd July 15. 2) Cranium of an unknown animal. p. 163.

Bacon, John, Jr. Polythalamia in sand from the Sahara desert. J. v. 5, no. 3, art. 30, p. 402–4, illus. Rd Aug. 5.
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Hentz, N. M. Descriptions and figures of the Araneides of the United States. J. v. 5. no. 4, art. 35, p. 443–79, 4 pl. Pub. in Dec.
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New species of Nemertes & Planaria, p. 137. Rd July 2.

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On certain N. A. reptiles, p. 137–38.

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Existence of dunes on shores of upper American lakes, p. 41–2.

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On seventeen year locust, p. 71–2.

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MASSACHUSETTS GEOLOGICAL SURVEYS (1830)

History

"On the third of March, 1830, the Legislature of Massachusetts passed a resolve, authorizing and requesting the governor, with the advice of the Council, 'to appoint a Surveyor well skilled in astronomy and the art of surveying upon trigonometrical principles—to make a general survey of the Commonwealth, and from such astronomical observations and calculations as may be made, to project an accurate skeleton plan of the state, which shall exhibit the external lines thereof and the most prominent objects within those lines and their locations.'

"In Governor Lincoln's Message to the Legislature, May 29, 1830, we find the following recommendation: 'I beg leave to suggest to your consideration the utility of connecting with the geographical surveys, an examination of the geological features of the state, with a view to the exhibition of them on the map. Much knowledge of the natural history of the country would thus be gained, and especially the presence of valuable ores, with the localities and extent of quarries, and of coal and lime formations, objects of enquiry so essential to internal improvements, and the advancement of domestic prosperity would be discovered, and the possession and advantages of them given to the public . . .'

"In conformity with these suggestions, the Legislature, on the 5th of June, 1830, resolved 'That his Excellency the Governor by and with the advice of the Council, be, and he is authorized to appoint some suitable person, to make a geological examination of the Commonwealth in connection with the General Survey, in order that the same may be inserted on the map which may be published . . .'

"On the 26th of June, 1830, Governor Lincoln issued a commission to the author of the following report, directing him 'to make a geological examination of this commonwealth' . . .

"On February 2, 1831, the Legislature still further authorized his Excellency the Governor 'to direct the person who is appointed to make a geological survey of the Commonwealth, to cause to be annexed to his Report on that subject, a list of the native mineralogical, botanical and zoological productions of the Commonwealth, so far as it may be practicable to ascertain the same within the limits of the appropriation already made for this Survey" . . .

"On the 12th of April, 1837, the Governor and Council were authorized and requested to appoint some suitable person or persons to make a further and thorough geological, mineralogical, botanical and zoological survey of this Commonwealth . . ." The above extracts are taken from HITCHCOCK, Edward. History of the Survey. Final Report. 1841, v. 1, pref. p. 5–7.

On January 1, 1832, Hitchcock presented a "Report on the Economical Geology of Massachusetts," of which 600 copies were ordered printed on March 24, 1832 (see Reports—1832 & 1833 below).

A full Report was made in 1833, of which 1,200 copies were ordered printed. A second edition was published in 1835, on an order of February 19, 1834, prescribing for 500 copies of the new edition.

Associated with Hitchcock in the writing of the section concerned with the "Scientific Geology of Massachusetts" in the Reports, were T. W. HARRIS, David S. C. H. SMITH, Ebenezer EMMONS, J. V. C. SMITH, Thomas A. GREENE, John Milton EARLE, Joseph G. TOTTEN, N. M. HENTZ, John BLODGET, and A. A. GOULD.

A "Re-examination of the Economical Geology" was published in 1838. In December, 1839, Hitchcock presented his "Final Report" in two large quarto volumes, of which 1,500 copies were ordered printed, by a resolution of the ninth of April, 1839. (see REPORTS: 1841).

The Survey ordered on the 12th of April, 1837, noted above, is for bibliographical purposes treated under the ZOOLOGICAL AND BOTANICAL SURVEY OF MASSACHUSETTS (1837), q.v. This was in many ways a distinct survey, and had a specially selected corps of workers.

Other reports were made by Hitchcock in 1853 and 1858, the latter treating of the "Ichnology of New England" (see REPORTS, below). A list of the documents relating to the Survey which appear in the Massachusetts State Documents are enumerated below under the BIBLIOGRAPHY, q.v., presented in a somewhat different fashion from that in HASSE, (2), p. 206–9, q.v.

For critical discussions of the Reports, see also MERRILL, (1), p. 307–15. (See Annot. Bib.). See also MERRILL. First 100 yrs. Amer. Geol. 1924. p. 142–52.

The expenses of the Hitchcock Surveys, totalled, exclusive of cost of publication, $4,530 (according to Merrill—see Bibliography: 1920, below).

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1838 ———. Second annual report on the geology of the public lands belonging to the states of Massachusetts and Maine. (In H. Doc. 70. 1838. 93 p.).

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1839 MASSACHUSETTS. Treasurer. Treasurer's statement of several sums paid out for the various surveys. (In H. Doc. 11. 1839. 3 p.).

1840 ———. Tables showing expenditures on account of geological surveys. (In H. Doc. 22. 1840. p. 31–2).

1841 ———. Detailed financial statement from Board of Education, and Bank Commissioners, the Agricultural, Trigonometrical, Botanical, Geological, and Astronomical Commissioners, and Surveys; together with statements from each survey on the present conditions of work and probable time and expense to complete same. (In H. Doc. 9. 1841. 20 p.).

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see 1832, above, for preliminary pub. of this part. Copies printed by order of March 24. Re-examination pub. 1838, (below, q. v.)

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Submitted June 1, 1833.

Pt. 3 SCIENTIFIC GEOLOGY OF MASSACHUSETTES. p. [111]–541.
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Pt.4 A CATALOGUE OF THE ANIMALS AND PLANTS IN MASSACHUSETTS. p. [543]–652.
Submitted Oct. 1, 1833. Contains an enumeration of 687 genera of animals and 2976 species; of plants 580 genera, and 1703 species.

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   List of land and fresh water shells in Massachusetts, so far as they have been ascertained, by John Milton EARLE. p. 557–59, 652.
   List of shells observed on and near the coast of New England, by Joseph G. TOTTEN. p. 559–62.
6. Crustacea, from the notes of A. A. GOULD. p. 563–64.
7. Araneides, Latr., by N. M. Hentz. p. 564.
8. Insects, by T. W. HARRIS. p. 566–95.
   Written Feb. 1833.
9. Radiata. p. 596.
10. Catalogue of plants growing without cultivation. . . p. [599]–652.
    With the assistance of John BLODGET.

APPENDIX. A catalogue of specimens of rocks and minerals illustrating the Report of the Geological Survey of Massachusetts. p. [653]–78.
1550 specimens noted.

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THE AMERICAN BOTANICAL REGISTER (1831)

History

The AMERICAN BOTANICAL REGISTER was edited by William Rich and John Andrew Brereton, and was intended as a monthly, but appears to have been issued irregularly in three numbers, between the years 1825 and 1830. Its subscription price was $12.50 per annum. It contained 48 unnumbered descriptive pages of 24 different plants with accompanying colored plates.

Dr Barnhart of the N. Y. Botanical Garden believes it may be the "Brereton Botanical Journal mentioned by Rafinesque (New Flora. 1837. pt. 2, p. 7), among the unsuccessful ventures reaching only one or a few numbers."

A notice of the Register appeared in the Amer. J. Sc. v. 20, no. 1, p. 160–61. April, 1831. A perfect copy was examined at the N. Y. Botanical Garden Library.

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pl. 25–28 have no descriptive text, but are appended to no. 3.

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THE MONTHLY AMERICAN JOURNAL OF GEOLOGY AND NATURAL SCIENCE, PHILADELPHIA (1831)

History

The first number of the MONTHLY AMERICAN JOURNAL OF GEOLOGY AND NATURAL SCIENCE, edited by G. W. Featherstonhaugh, appeared in July, 1831. In his "Prospectus" dated May 20, 1831, the aims of the Journal were presented as follows:

> "It is proposed to issue one number of this work monthly, each number to consist of fifty pages, with appropriate figures and illustrations, got up in an instructive and artist like manner.
>
> "Each number will contain a continuous essay on geology as a science, treated in an elementary manner . . .
>
> "The various branches of natural history, zoology, botany, mineralogy, meteorology, and the nature and forces of all physical natural agents, will be treated of and illustrated in a familiar and instructive manner.
>
> "Comparative anatomy, together with the habits and propensities of animals, also the phenomena attending vegetable nature, especially American nature, whether fossil or recent, will be liberally discussed in the pages of this Journal . . .
>
> "Critical reviews and examinations of works on natural history will occasionally appear . . ." The JOURNAL, v. 1, p. 1–4.

Publication was suspended at the close of the first volume in June, 1832. Featherstonhaugh attempted to procure Congressional aid for the support of the Journal, but he met with no success.

MERRILL, (1), p. 301–3, (see Annot. Bib.) calls it a "short-lived but vigorously conducted journal." See also MERRILL, First 100 yrs Amer. Geol. 1924. p. 136–38.

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————. Description of the jaws, teeth, and clavicle of the Megalonyx laqueatus. p. 74–6.

Abstract of a paper rd before Phila. Acad. Nat. Sc. (1812), Mar. 8, 1831. In its Jour. v. 6, pt. 2, p. 269–88, 3 pl. [26 fig.]

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SCHOOLCRAFT'S EXPEDITION INTO THE INDIAN COUNTRY (1831)

History

This Expedition was sent out by the U. S. government "to endeavor to terminate the hostilities between the Chippewas and the Sioux." Henry Rowe Schoolcraft was placed in charge, with Douglass Houghton as his chief assistant. The Journey was made during the summer of 1831. Schoolcraft's "Report" was rendered October 1, 1831. Houghton made a report on the copper of Lake Superior.

The Report and some papers relating to the natural history of the regions explored are also to be found in Schoolcraft's "Summary Narrative," 1855, a reprint of Cass's Expedition (1820), and Schoolcraft & Allen's Expedition (1832), q.v. See below, 1855.

The journey was made between June 25 and September 4, 1831, and the party traversed some 2,308 miles during this period.

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TENNESSEE GEOLOGICAL SURVEYS (1831)

History

By an act passed December 21, 1831, the Tennessee state legislature passed an act which authorized the making of a state geological survey of Tennessee under the direction of Dr Gerard Troost, then professor of mineralogy, geology and chemistry at the University of Nashville.

He was reappointed every two years until 1850, and during this period rendered ten brief biennial reports (see below REPORTS). About $4,500 was expended by the state during Troost's regime as state geologist, according to MERRILL, (see Bibliography: 1920, below).

In 1854, Dr James M. Safford was appointed state geologist by virtue of an act passed in February of that year, and was to receive $1,500 annually for his services. Safford served six years. The Survey was suspended upon the outbreak of the Civil War, and was resumed under Safford's direction in 1871.

He published three biennial reports, and a Final Report, not issued, however, until 1869. Safford also published some papers in the American Journal of Science (see PAPERS IN SOCIETY TRANSACTIONS, below). See also BIBLIOGRAPHY, below.

Discussion of the contents of the various surveys and reports under Troost and Safford, will be found in MERRILL, (1), p. 303–4, 366–67, 534. (See Annot. Bib.). See also MERRILL. First 100 yrs Amer. Geol. 1924. p. 111–12, 138–39, 215–16, 331–33, 436–38.

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VIRGINIA HISTORICAL AND PHILOSOPHICAL SOCIETY, RICHMOND, VA. (1831)

History

"The Virginia Historical and Philosophical Society was organized on the 29th of December, 1831, by a few gentlemen, who assembled in the hall of the House of Delegates—adopted a Constitution—elected officers and appointed an orator to deliver the first

Anniversary Address. A committee was also designated to prepare an Address to the public, to explain the views of the Society, and to invite the aid of men of intelligence and public spirit throughout the state.

"The Address called attention to some of the following items of importance (relating especially to the natural history of the state):

"no. 8, Communications and specimens relating to zoology or botany or any other branch of natural history.

"no. 9, Facts and essays connected with the geology of the state; also descriptions and drawings of mines, mineral springs, ancient fortifications, caverns, mountains, rivers, lakes, or any other natural curiosities.

"no. 11, Communications on the mineralogy of the state; every description of mineral specimens; viz., the different species of rocks, metallic substances, earths, salts, coal formations and petrifactions."

Extract from its COLLECTIONS. v. 1, 1833. p. 3–4.

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ANTIQUARIAN AND NATURAL HISTORY SOCIETY OF THE STATE OF ARKANSAS, LITTLE ROCK (1832)

History

This Society was organized in 1832 at Little Rock, Arkansas. It had an active career of about 18 years, when it passed out of existence with the departure of its mainstay and most influential member, the Rev. W. W. Stevenson.

The records of the meetings of the Society are to be found in the files of the "Gazette," published in Little Rock in that period. In 1842, William Byrd Powell, a temporary resident of Little Rock, made a geological report upon the Fourche Cove, which he presented to the Society, and which was published in the same year.

The Society appears to have maintained some sort of a cabinet of geological, mineralogical, botanical and zoological specimens. Its most active members in 1842, were W. W. Stevenson, William Yeager, Alden Sprague, George C. Watkins, D. J. Baldwin, Thomas W. Newton, William Pelham, A. Fowler, and James De Baum.

References to the history of the Society as recorded in the newspapers of the day, are kept on file in the Department of Archives and History of the Arkansas History Commission, Little Rock.

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See also MERRILL, (1), p. 373. (See Annot. Bib.) See also MERRILL. First 100 yrs. Amer. Geol. 1924. p. 223.

GEOLOGICAL SOCIETY OF PENNSYLVANIA, PHILADELPHIA (1832)

History

The GEOLOGICAL SOCIETY OF PENNSYLVANIA was organized at a meeting held in Philadelphia on February 22, 1832, at which J. B. Gibson was elected president, S. H. Long and Nicholas Biddle vice-presidents; P. A. Browne, corresponding secretary; Richard Harlan, recording secretary; and Henry S. Tanner, G. W. Featherstonhaugh, and Richard Harlan, curators.

The objects of the Society as set forth in its Constitution, published in 1834, were:

"1) . . . Collecting, digesting and publishing for their individual use and that of the public at large, at convenient intervals, and by such means as shall be hereafter determined, such new, interesting and useful facts and discoveries in geology as may be acquired by their joint efforts.

"2) . . . The gradual accumulation of the most approved books, maps, specimens, and all such documents and materials as shall best elucidate the science in all its parts, and to convey the most authentic information on subjects in any manner connected with geology and its sister sciences.

"3) . . . Preparing brief instructions for members of this Society and others, who design to visit distant parts of the state, pointing out those sections which are most likely to reward the geological inquirer in his researches, the phenomena to be observed, the most desirable specimens to be procured, directing the attention to the acquisition of such information generally as may tend to enlarge the sphere of our geological knowledge.

"4) . . . Affording pecuniary or other assistance to such travellers or surveyors as may require it, and as the Society may from time to time, direct, in order to facilitate the attainment of any particular object of research.

"5) . . . By corresponding and communicating with similar societies abroad and with scientific individuals engaged in geological investigations everywhere.

"6) . . . By writing communications, either speculative or practical, from members and others, qualified to furnish contributions on subjects connected with the leading objects of the Institution.

"7) . . . Causing the formation of auxiliary societies in the several counties of the state, or by accepting as such, the co-operation of societies already established . . ." From the CONSTITUTION, p. 8–9.

At the institution of the Society, there were seven members; in 1835, the number had grown to more than two hundred. Shortly after the inception of the organization, a ''Circular'' containing twenty-eight queries was distributed throughout the state, with the intention of obtaining specific information concerning the geology and mineralogy of the state of Pennsylvania. A copy of this circular appeared in the MONTHLY AMERICAN JOURNAL OF GEOLOGY AND THE NATURAL SCIENCES (1831), q.v., ed. by G. W. Featherstonhaugh, one of the members of the Society.

This Journal, during its brief existence, 1831–32, was the organ of publication for several of the early papers read before the Society (see PAPERS ON NATURAL HISTORY, below: 1832).

In 1834, its ''Constitution'' was published; and in 1834, part 1 of its ''Transactions'' was published. Part 2 appeared in 1835. A notice and review of these appeared in the Amer. J. Sc. v. 27, no. 2, p. 347–55. Jan. 1835.

It was a primary object of the Society, and its affiliated organizations, the Philadelphia Academy of Natural Sciences (1812), q.v., Chester County Cabinet Natural Sciences (1826), q.v., the Bucks Co., the Montgomery Co., the Bradford Co., and the York Co., Cabinets of Natural Sciences, to bring about a geological and mineralogical survey of the state.

These organizations from time to time impressed the state legislature with the importance of the Survey to the state, and in 1836 finally succeeded in having H. D. Rogers appointed to undertake the GEOLOGICAL SURVEY OF PENNSLVANIA (1836), q.v.

In 1834–35, the officers were Andres Del Rio, president; H. S. Tanner and S. H. Long, vice-presidents; Richard Harlan, corresponding secretary; recording secretary, J. M. Brewer; Richard Harlan, Jacob Green, and William F. Clemson, curators.

With the chief aim of the Society's existence accomplished in 1836, the Society came to an early end, the exact details of which are not accurately known.

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See also Tennessee Geol. Surv. (1831).

Green, Jacob. Some experiments on a sulphated ferruginous earth from Kent County, in the state of Delaware, with a view to ascertain its commercial value. T. p. 33–6.

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Taylor, R. C. On the relative position of the transition and secondary coal formations in Pennsylvania, and description of some transition coal or bituminous anthracite, and iron ore beds near Broadtop Mountain, in Bedford County; of a coal vein in Perry County, Pa. T. p. 177–93.

————. Notice as to the evidences of the existence of an ancient lake, which appears to have formerly filled the limestone valley of Kishacoquillas in Mifflin County, Pa. T. p. 194–203, illus. Col. map.

————. On the mineral basin or coal field of Blossburg on the Tioga River, Tioga Co., Pa. T. p. 204–19.

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See also Tennessee Geol. Surv. (1831).

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Miller, Edward. Geological description of a portion of the Allegheny Mountain, illustrated by drawing and specimens. T. p. 251–55, map.

Harlan, Richard. Notice of fossil vegetable remains from the bituminous coal measures of Pennsylvania, being a portion of the illustrative specimens accompanying Mr. Miller's "Essay on a geological section of the Allegheny Mountain, near the Portage Railway." T. p. 256–59, 1 pl. [4 fig.]

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Conrad, T. A. Description of five new species of fossil shells in a collection presented by Mr. Edward Miller to the Geological Society of Pennsylvania. T. p. 267–70, 1 pl. [5 fig.]

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Koehler, H. On the anthracite deposit at Tamaqua, Schuylkill County, Pa. T. p. 326–27, sect. map.

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Conrad, T. A. Observations on a portion of the Atlantic Tertiary region. T. p. 335–41, 1 pl. [4 fig.]

Harlan, Richard. Notice of the Os ilium of the Megalonyx laqueatus, from Big Bone Cave, White County, Tennessee. T. p. 347, 1 pl.

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Johnston, J. C. On fossilized corn. . . T. p. 414–15.

NEW YORK STATE AGRICULTURAL SOCIETY, ALBANY, N. Y. (1832)

History

The New York State Agricultural Society was organized at Albany in 1832. The first volume of its Transaction, for 1841, was published in 1842. In 1856, it occupied part of the new Geological Hall erected for the New York State Cabinet of Natural History (1843), q.v.

The chief contributions of the Society to natural history were the entomological researches carried on by Asa Fitch, and the various county surveys made under its auspices.

For the natural history contents of the volumes of the Transactions, see below PAPERS ON NATURAL HISTORY.

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1844 **v. 3, for 1843.**

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1847 **v. 6, for 1846.**

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FITCH, Asa. The currant-moth; Abraxus ? Ribearia. p. 461–69, 1 pl. [11 fig.]

STEVENS, A. H. The food of plants. p. 518–37.

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1850 **v. 9, for 1849.**

*JOHNSTON, J. F. W. The relations of physical geography to practical agriculture: lecture first. p. 161–75.

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General applications of geology, p. 728–35.

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FITCH, Asa. A historical, topographical and agricultural survey of Washington County; parts 2 & 3. p. 753–944.
pt. 3, Rocks & soils, p. 816–907; fossils, p. 862–68.
pt. 1 in v. 8, see above.

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Say, Thomas. Descriptions of new species of the heteropterous Hemiptera of North America, Dec. 1831. p. 754–812.

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See also v. 19, p. 587.

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Denniston, Goldsmith. Survey of the county of Steuben. p. 547–661, map.

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1863 **v. 22, for 1862.**

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Pt. 3, Geology, p. 153–66.

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SCHOOLCRAFT AND ALLEN'S EXPEDITIONS TO THE SOURCE OF THE MISSISSIPPI RIVER (1832)

History

Lieut. J. Allen was detailed in the early part of 1832 to accompany H. R. Schoolcraft on his expedition to the northwest Indians. His instructions were briefly as follows: "The officer will be directed to keep a Journal of the expedition; to describe the country through which it may pass . . . to ascertain the manners and characters of the various Indian tribes . . . He will also be directed to note the nature of the soil, the geology, mineralogy, and natural history; he will remark upon the game and the fishes . . .'' ALLEN, p. 1–2 (see ALLEN, below).

The journey was begun on June 6 and ended on August 26, 1832. The route traversed was as follows: ''Up the Lake (Superior), to Fond du Lac; thence up the Fond du Lac River, ninety-one miles, to the mouth of the East Savanne River, and across by the latter river, the Savanne portage, and the West Savanne River to Sandy Lake, and the Mississippi—thence up the Mississippi through Lake Winnipeg, Upper Red Cedar or Cass Lake, and Lac Traverse, to Lake La Biche, or Elk Lake, the source of the river, thence, returning back to Cass Lake, and across the country by small lakes and portages, to the source of the Crow Wing River, and down this to the Missisippi again . . . to the St. Croix River, by the latter to its source in Superior; again, 20 miles from Fond du Lac River; back to the Sault Ste. Marie . . .''

Allen rendered his report November 25, 1833, and it was published in the federal documents in 1834 (see below). Schoolcraft's narrative appeared in 1834, and a revised account in 1855 in his ''Summary narrative.''

The party consisted of Schoolcraft; Houghton, who was with Schoolcraft in 1831, as surgeon; Allen as the military representative, and George Johnson as interpreter. Charles Beyrich, a Prussian scientist, also accompanied the expedition. He died of the cholera at Fort Gibson, Sept. 1834.

See also Schoolcraft's Expedition into the Indian Country (1831), the reports of which are contained in the Summary Narrative, 1855, noted below.

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See Schoolcraft's Exp. to Indian County (1831).

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See Schoolcraft's Exped. to Indian Country (1831).

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DELAWARE COUNTY INSTITUTE OF SCIENCE, MEDIA, PA. (1833)

History

"On the 21st of September, 1833, the institution under whose authority this history was prepared, was organized with the title of the 'Delaware County Institute of Science' by the association at first of only five individuals [George Miller, George Smith, Minshall Painter, John Miller, and John Cassin]. The number of members gradually increased, and when it became necessary for the institution to hold real estate, application was made to the Supreme Court for corporate privileges, which were granted on the 8th day of February, 1836. A hall of very moderate pretensions was built in Upper Providence in the year 1837 [in September] at which the members continued to hold their meetings till the present time. Lectures were also given in the Hall for some time after its erection. The number of its members was never large, but through the persevering efforts of a few individuals, it has been enabled to accomplished most, if not all, the objects contemplated in its establishment. The museum of the Institution embraces a respectable collection of specimens in every department of the natural sciences, and particularly such as are calculated to illustrate the natural history of the country. It also embraces many other specimens of great scientific or historical value. Nor has the establishment of a library been neglected . . . It has not failed to observe and record local phenomena and to investigate local facts; and the usefulness and value of the natural productions of the county, have, in more than one instance, been established by laborious scientific investigations . . ." Smith. p. 357–58. (See below).

The Institute is still maintaining an active interest in scientific matters.

Publication

1862 SMITH, George. History of Delaware County, Pennsylvania, from the discovery of the territory included within its limits to the present time with a notice of the geology of the county, and catalogues of its minerals, plants, quadrupeds and birds, written under the direction and appointment of the Delaware County Institute of Science. Phila. 1862. 581 p. illus. pl. maps.

Scientific Contents

SMITH, George.	Geology of Delaware Co. p. 403–15, map.
JAMES, T. P.	Botany. p. 416–33.
CASSIN, John.	Quadrupeds. p. 434.
———.	Birds. p. 435–39.

ESSEX COUNTY NATURAL HISTORY SOCIETY, SALEM, MASS. (1833)

History

''The formation of a Society of Natural History, was proposed in the 'Salem Gazette' for Tuesday, Feb. 1, 1831, in a communication under the signature of Elah (J. M. Ives). In the 'Salem Observer' for the Saturday following, two other communications on the same subject appeared, calling the public attention to the importance of institutions designed for the encouragement of a taste for the study of the natural sciences.

''Occasionally articles of a similar import were published in the newspapers but no definite action was taken until Dec. 1833, when on the evening of Saturday, the 14th inst., a meeting of those friendly to this project was held which resulted in the organization of the Essex County Natural History Society. Dr Andrew Nichols of Danvers, president, and J. M. Ives, secretary, were the officers elected. The Act of Incorporation was obtained February 12, 1836 . . .'' From ESSEX INSTITUTE (1848) Act of incorporation . . . Salem, Dec. 1855. p. 4.

''The Essex County Natural History Society will meet at Topsfield, on Wednesday, next, the 16th day of the present month, at nine and two o'clock, to choose committees, and to make arrangements for the ensuing season.

''At the meeting the objects of the Society will be explained and specimens in the various branches with apparatus for their collection, will be exhibited and illustrated . . . including some of the plates of Mr Audubon's 'Birds of America.' Ladies and gentlemen who feel interested in the objects of the Society, are invited to attend . . .'' WHEATLAND, Henry. (In ESSEX INST. Proc. v. 2, p. 24. 1856).

This meeting of April 11, 1834, described by Wheatland inaugurated a characteristic feature of the Society and its successor the ESSEX INSTITUTE (1848), q.v., namely, the field meeting.

Between 1836 and 1852, the Society issued three numbers of its Journal, an analysis of the papers of which will be found below under PAPERS ON NATURAL HISTORY. The Society also conducted annual floral and horticultural exhibitions, during the first few years of its existence.

In 1848, the Natural History Society was merged with the Essex County Historical Society to form the present ESSEX INSTITUTE, of which the former became the natural history section of the Institute. For its subsequent activities, consult ESSEX INSTITUTE (1848).

The officers of the Essex County Natural History Society were presidents: 1833–45, Andrew Nichols; 1845–48, John L. Russell; vice-presidents: 1833–40, William Oakes; 1833–45, G. B. Perry; 1840–48, J. C. Lee; 1845–48, William Prescott; 1846–48, William Mack.

The Society maintained a museum and a library. For extended accounts of the history of the Society, see below, the BIBLIOGRAPHY.

Bibliography

See also Bibliography under ESSEX INST. (1848)

1836 ESSEX COUNTY NATURAL HISTORY SOCIETY. Journal of the . . . containing various communications to the Society. Salem, Printed for the Society by William Ives & co., 1836–52. 4+136 p.

In three numbers (see below for dates of publication) p. 25–44, Constitution, Act of Incorporation, Catalogue of Library, etc.

1838 ANON. Floral and horticultural exhibitions of the Essex County Natural History Society. Boston, 1838–45. (In Mag. Horticulture & Botany. v. 4, p. 269–72, 1838; v. 7, p. 453–62, 1841; v. 8, p. 446–57, 1842; v. 10, p. 462–71, 1844; v. 11, p. 459–61, 1845).

1855 ESSEX INSTITUTE. Act of incorporation, constitution and bylaws of the Essex Institute, incorporated February, 1848, with a catalogue of the officers and members. Salem, Dec. 1855. 24 p.

History of formation of Natural History Society, p. 4–5. Act of Incorporation, p. 9–10.

1856 WHEATLAND, Henry. On the history of the Essex County Natural History Society, and some of its pioneers in the pursuit of natural history. Salem, Mass., 1856. (In Essex Inst. Proc. v. 2, p. 24–8).

1865 ESSEX INSTITUTE. An historical notice of the Essex Institute . . . Salem, Dec. 1865. 44 p.
History of Natural History Society, p. 8–11.

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no. 3,	108–36	March, 1852.

Papers on Natural History

1836 Russell, J. L. An address delivered before the Essex County Natural History Society on its second anniversary. J. no. 1, p. 3–24. Rd June 15.

1839 ———. Familiar notice of some of the shells found in the limits of Essex County, Massachusetts, with reference to description and figures. J. no. 2, p. 47–76.
See under 1852. Retrospect of some of the shells. . .

Wheatland, Henry. Notice of the occurrence of specimens of Vespertilio pruinosus, Say (hoary bat). J. no. 2, p. 76–7.

Prescott, William. A sketch of the geology and mineralogy of the southern part of Essex County, in Massachusetts. J. no. 2, p. 78–91. Com. April 24.

Russell, J. L. Two new species of Musci. J. no. 2, p. 92–3, illus.
Polytrichium incurvatum; & P. boreale, nob.

Nichols, Andrew. Remarks on the Hyla femoralis, observed in the north parish of Danvers. J. no. 2, p. 93–6.

Russell, J. L. Notice of rare plants; with a description of a curious variety of Cladonia uncialis. J. no. 2, p. 96–100.

Harris, T. W. Remarks upon Scarabaeus goliatus and other African beetles allied to it. J. n. 2, p. 101–7.

1842 Russell, J. L. Minute polythalamous plants occurring on the coast of Maine, New England. J. no. 3, p. 121–22. Rd June 29.

1843 Nichols, Andrew. Occurrence of the Scaphiopus solitarius in Essex County, with some notices of its history, habits, etc. J. no. 3, p. 113–17. Rd June 17.

1852 Anon. Retrospect of some of the shells found in Essex County. J. no. 3, p. 110–13.

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ANON. The Danvers bowlder, or ship rock. J. no. 3, p. 120–21.

WHEATLAND, Henry. Notice of several fishes of rare occurrence. J. no. 3, p. 122–25.

RUSSELL, J. L. Further notice of rare plants. J. no. 3, p. 125–26.

ANON. Conspectus of shells found in Essex County, etc. J. no. 3, p. 126–33.

MARYLAND GEOLOGICAL SURVEYS (1833)

History

"The first Geological Survey of Maryland dates from 1833, when, on March 6 and March 16, resolutions were passed by the General Assembly of the state providing for the organization of official scientific work. Under the first resolution the governor and council were authorized to appoint a competent engineer to prepare 'a plan and drawing for a complete map of Maryland' and also to make such 'further examinations and surveys as may be requisite, for the purpose of exhibiting the prominent geographic and topographic features of the country; and also to collect such statistical information as will be useful and is generally exhibited on modern improved maps.'

"Under the second resolution the governor and council were authorized to appoint a geologist 'to act in conjunction with said engineer' and 'to make the necessary geological researches and report to the governor and council before the next session of the General Assembly, upon the expediency and cost of the Geological Survey of the state.' In accordance with these resolutions J. H. Alexander was appointed engineer and J. T. Ducatel, geologist. The result of the preliminary survey formed the basis of a joint report to the General Assembly, and on Feb. 25, 1834, an act was passed 'for making of a new and complete map and geological survey of the state' and Messrs Alexander and Ducatel were again appointed engineer and geologist respectively . . .

"No further geologic work was attempted in Maryland until the General Assembly in March, 1848, authorized the governor to appoint a state agricultural chemist, and although the act authorized an examination of the mineral deposits, no attempt was made to carry out this provision of the act until the appointment of Philip T. Tyson in 1858. (James Higgins served as chemist from 1848–1858 but did little of either geological or mineralogical value.) Mr Tyson who was much interested in geologic problems, published his first report, which appeared in 1860, a geologic map of the state on the scale of 12 miles to the inch, which was by far the most complete representation of Maryland's geology that had been attempted up to that time.

"In his second and last report issued in 1862, just prior to the repeal of the act establishing the office of state agricultural chemist, he devoted much more attention to the mineral resources of the state than in his earlier report . . ." From HAYES, p. 69–70.

See also MERRILL, (1) p. 321–23, 428, (see Annot. Bib.) for critical review of the Reports of the Surveys. Below in the Bibliography will be found a full review of the history and literature concerning the geology, etc., of the state, in many cases by individual counties. See also MERRILL, First 100 yrs. Amer. Geol. 1924. p. 159–61, 291–92.

According to Merrill, (see Bibliography: 1920, below), the expenses of the Ducatel-Alexander Survey totalled about $17,909.

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DUCATEL, J. T. Report of the geologist. p. 13–56.

ALEXANDER, J[ohn] H[enry]. Report on the new map of Maryland. Annapolis, 1834. 15 p. map.

1836 DUCATEL, J[ulius] T[imoleon], and ALEXANDER, J[ohn] H[enry]. Report on the new map of Maryland. Annapolis, 1836. 84 + [1] p. map.

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p. 3–34 Alexander, J. H. Engineer's Report.
p. 35–80 Ducatel, J. T. Report of the geologist.

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sect. 1 Geological examination of Dorchester, Somerset, and Worcester Counties on the eastern shore of Maryland. p. 39–53.
2 Agricultural resources of the lower counties on the eastern shore of Maryland. p. 53–8.
3 On the comparative value of shell lime and stone lime p. 58–63.
4 On the discovery of green-sand, in "Jersey marl" in Maryland. p. 63–9.
5 Geological examination of St. Mary's County, in reference to agricultural resources. p. 69–76.
6 Progress of the state geological survey. p 76–80.
Appx. p. 81–4.

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p. 1– 60 Ducatel, J. T. Report of the geologist.
p. 61–104 Alexander, J. H. Report of the engineer. Made Feb. 15, 1837.

1838 DUCATEL, J[ulius] T[imoleon]. Annual report of the geologist of Maryland, 1837. Annapolis, 1838. 39 + [1] p. 2 maps.

Written Dec. 26, 1837. Rev. in Amer. J. Sc. v. 32, p. 191. 1837.

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UNITED STATES NAVAL LYCEUM, BROOKLYN, N. Y. (1833)

History

"This institution has recently been established at the Navy Yard, near New York . . .

"The objects of the members of this association are contained in the following extract from an article prefixed to the Constitution of the Society. 'We, the officers of the Navy and the Marine Corps, in order to promote the diffusion of useful knowledge, to foster a spirit of harmony, and community of interest in the service; and to cement the links which unite us as professional brethren, have formed ourselves into a Society, etc. . . .

"It is hardly possible that an institution created for such purposes, can interfere with the interests or views of any other similar association; but may, and in all human probability, will in time, contribute largely to the cause of useful knowledge.' As mere collectors of specimens in natural history, and curiosities, illustrative of the manners and customs of distant nations, which the members in the discharge of their official duties to their country, may be called upon to visit, they possess some advantages that they are not only willing but anxious to improve. In this way much has already been done, and the evidence may be found in almost every public collection of the kind in the country. But much more, by far, of what has thus been procured from abroad, has become almost a total loss to the cause of science, for the want of a place of general deposit. Such a depot now exists, and its utility has already been rendered apparent, by the contributions received from the officers of the U. S. Ship Falmouth, recently returned from a cruise in the Pacific and the U. S. Ship Peacock from the China and Indian Seas. Indeed the return of every national vessel, since the institution has been in operation, has contributed more or less, to its collections. These things in most instances have been obtained abroad, without the knowledge of the existence of the Naval Lyceum, and but for it, would by this time, have been scattered over the country, and in most cases, lost to the researches of the curious. If under such circumstances, the Museum and other departments receive important additions, much more may be expected, when the members of the Society shall go forth for collecting; stimulated to action, by an interest in the success of an institution, which they can feel to be of their own creation.

''November 27th, 1833, was held the first 'meeting of the subscribers, for forming a Society, with the object of establishing a permanent library, reading-room and museum of natural history, curiosities, etc.' And as soon as the Association was known to have assumed 'a local habitation and name' contributions flowed in upon it, with a liberality and profusion, that astonished even its most sanguine friends. All were encouraged, and an increase in confidence marked the proceedings of the Association. Within the period of twelve months, the Society has received upwards of two hundred donations, including over 1,300 volumes of books; while the departments of conchology, mineralogy, geology, botany, zoology, numismatology and the museum furnish interesting collections . . . Advantage was taken of a munificent donation from the Marine Insurance offices of the city of New York, to the amount of nearly five hundred dollars to procure such rare and valuable works, principally upon subjects of natural history, as were of the first importance to such an Association, and had not then been applied to the library.

''Ladies often appear on the list of donors to the Naval Lyceum, and have received the warmest thanks of the members. . . . Measures have been taken to procure in proper time, an act of incorporation. And hopes are entertained that at some day, the sciences, and different departments of natural history may be illustrated by a course of lectures. . . .'' From Amer. J. Sc. v. 27, p. 390–93, Jan., 1835.

The Society also issued a First annual report, and a catalogue of its library. The Lyceum remained active until 1891 when the contents of the museum, etc., were removed to the Naval Academy.

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1856 ————. Catalogue of the Library belonging to the . . . at the New York Navy Yard. N. Y. E. T. Callender & co., 1856. 57 p.
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ADVOCATE OF SCIENCE AND ANNALS OF NATURAL HISTORY (1834)

History

This was a monthly periodical, intended principally as a popularization organ of natural history subjects. The first number was published in August, 1834, and the periodical expired at the close of the first year. It was edited by the Wilmington naturalist, Dr. W. P. Gibbons.

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PEALE, T. R. Black-tailed or mule deer, Cervus macrotis. p. 11–3, illus.

X. Philosophy of botany; no. 1, Dissemination of seeds. p. 14–8.

GREEN, Jacob. Notes of a naturalist. p. 18–21.
Cont. in no. 3 (below)

CONRAD, T. A. . . . Claiborne, Alabama. . . p. 26–31.
From his "Note-book of a traveller".

GIBBONS, W. P. The tent-caterpillar, Clisiocampa neustrea. p. 31–6, illus.

GIBBONS, Henry. Some account of the Cicada septendecim, or periodical locust. p. 36–45, illus. (Cont. in no. 2, below)

X. Plants observed on an excursion to Quaker Bridge, May, 1834. p. 49–50.

TAYLOR, R. C. Letter on Sorex brevicauda. p. 53–4.

v. 1, no. 2, p. 57–104, September.

CONRAD, T. A. Mobile, Alabama . . . p. 57–61.
From his "Note-book of a traveller".

GIBBONS, Henry. Some account of the Cicada septendecim, or periodical locust. p. 79–86.
Cont. from preceding no., (above).

Short, C. W., and Riddell, J. L. Extracts from their "Directions for the gathering and preservation of plants for herbaria. . . " p. 88–99, illus.

Short's "Directions" in Transylvania Jour. Med. & Assoc. Sc. (1828), v. 6, no. 1, p. 59–74. Mar. 1833.

v. 1, no. 3, p. 105–52, October.

Green, Jacob. Notes of a naturalist. p. 105–11.
Cont. from no. 1 (above).

Gibbons, Henry. A sketch of the history of geology. p.112–20.
Cont. in no. 5, (below).

Anon, (A Farmer). Country museums. p. 138–40.
Extract from Niles' Weekly Register. p. 121–44 erratically paged.

Feuchtwanger, L. Carrageen or Irish moss. p. 141–44.
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v. 1, no. 4, p. 153–200, November.

Conrad, T. A. Sketches from the "Note-book of a traveller". p. 153–63.

Clemson, T. G. . . . On the geology of York County . . . p. 163–75.
Extracts from a Report rd before Geol. Soc. Pa. (1832), Oct. 29, 1834.

Gibbons, Henry. On classification and nomenclature. p. 188–91.

v. 1, no. 5, p. 201–48, December.

Gibbons, Henry. A sketch of the history of geology. p. 201–7.
Cont. from no. 3 (above) & cont. in no. 6 (below).

Gibbons, W. P. Sketch of the history of the whale. p. 208–16.
Cont. in no. 6 (below).

1835 **v. 1, no. 6, p. 249–96, January.**

Gibbons, W. P. Sketch of the history of the whale. p. 249–60.
Cont. from preceding no. & cont. in no. 7.

Gibbons, Henry. A sketch of the history of geology. p. 261–66.
Cont. from preceding no. & cont. in no. 7.

v. 1, no. 7, p. 297–344, February.

(Contains erratic pagination).

————. A sketch of the history of geology. p. 297–305 (wrongly given as p. 289–97).
Cont. from preceding no. & cont. in no. 8.

Clemson, T. G. Notes on the character of mines. p. 306–16 (wrongly given as p. 298–308).

Gibbons, W. P. Sketch of the history of the whale. p. 327–38 (wrongly given as p. 319–30).
Cont. from preceding no.

v. 1, no. 8, p. [345]–92, March.

Green, Jacob. Notes of a naturalist . . . p. 337, 346–51 (erratically paged).
Cont. from no. 3 (above).

Conrad, T. A. Notices of the geology of West Florida. p. 351–52.

Gibbons, Henry. Sketch of the history of geology. p. 360–67.
Cont. from preceding no. & cont. in no. 9.

v. 1, no. 9, p. 393–440, April.

Anon. Chronological analysis of the various papers hitherto published on the geology of the Upper Secondary and Tertiary formations of the United States. p. 393–400.

Gibbons, Henry. A sketch of the history of geology. p. 401–6.
Cont. from preceding no.

FEATHERSTONHAUGH SURVEY OF THE ELEVATED COUNTRY BETWEEN THE MISSOURI AND RED RIVERS (1834)

History

''In obedience to your instructions dated July 12, 1834, to repair to some point on the northern boundary of the territory of Arkansas, and personally inspect the mineral and geological character of the highlands and water-sheds where the public lands are situated, of that elevated country, lying between the Missouri River and Red River, known under the designation of the Ozark Mountains, and limiting my return to the seat of government to make my report, to the first day of February, 1835. . . .'' FEATHERSTONHAUGH. Report. p. 5. Written Feb. 17, 1835. (In House Docs., p. 2).

The act authorizing this expedition was passed June 28, 1834, and the Secretary of War engaged Featherstonhough for the examination.

For a critical estimate of the geological results of the expedition, see MERRILL, (1), p. 323–25. (See Annot. Bib.) See also MERRILL. First 100 yrs. Amer. Geol. 1924. p. 161–63.

Collections of geological and mineralogical specimens were made, which were presented to the government.

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(1) House edition.

1835 FEATHERSTONHOUGH, G[eorge] W[illiam]. . . . Geological report of an examination made in 1834, of the elevated country between the Missouri and Red Rivers. . . . Washington, Gales & Seaton, 1835. 97 p. (In U. S. 23rd Cong., 2d sess., H. Doc. v. 4, no. 151) Serial no. 274.

Rev. in Amer. J. Sc. v. 28, no. 2, p. 379. July, 1835 & in Franklin Inst. Jour. ser. 2, v. 17, p. 109–17, 184–90. 1836.

CONTENTS:

p. 5–42 General exposition of geological principles.
p. 42–97 Results of the tour.

(2) Senate edition.

———. . . . A report of the mineralogical and geological investigations made by. . . . Washington, 1835. 43 p. (In U. S. 23rd Cong., 2d sess., Sen. Doc. v. 4, no. 153) Serial no. 269.

CONTENTS:

p. 2–16 General exposition of geological principles.
p. 16–42 Results of the tour.

YALE NATURAL HISTORY SOCIETY (1834)

History

"The YALE NATURAL HISTORY SOCIETY was formed in March, 1834. The idea of such an institution was first conceived by a member of the Medical Class of that year, John F. Lima, of Brazil. Being a devoted lover of natural science and a warm friend of the Medical Institution of Yale College, he projected a plan for making a collection of specimens in the several departments of natural history to be deposited in the Medical Institution. . . .

"After some conference with a few friends, he and about twenty others—principally members of the Medical Class—formed themselves into a Society under the title of the YALE INSTITUTE OF NATURAL SCIENCE, and adopted the following Constitution. . . . The object of the association shall be to promote the pursuit and critical investigation of natural science, in its various branches.

The Society for the first eighteen months after its formation existed merely. It held its first annual meeting in February, 1835. Things continued in this indifferent state until the autumn of 1835 when a contribution of specimens of eastern ornithology and zoology made to the Society by one of its earliest members, the Rev. Peter Parker of China, revived the waning interest of the members. Immediately on the receipt of this collection, a meeting of the Society was held. . . .

''After some conference it was concluded to remodel the Constitution of the Society. A committee consisting of Professors Silliman, Tully and Knight, and Messrs. Bacon and Herrick was accordingly appointed to revise the Constitution. This they did, and at the annual meeting held Nov. 25, 1835, reported the following Constitution. . . . This Association shall be called the YALE NATURAL HISTORY SOCIETY, and its object shall be the critical pursuit and investigation of natural science. . . .'' Extracts from the MS record books of the Society deposited in the Library of Yale University.

Among the active members of the Society were James D. Dana, A. R. Terry, Alfred S. Monson, Theodore D. Woolsey, C. U. Shephard, Joseph Barratt, Abraham Sager, Benjamin Silliman, Jr., James D. Whelpley, John P. Brace, Samuel St. John, James G. Percival, John H. Redfield, Charles Pickering, E. C. Herrick, W. C. Redfield, J. H. Linsley, O. P. Hubbard, Eli W. Blake, Eli Ives, Abraham Halsey, E. H. Leffingwell, F. H. Gregory, E. T. Fitch.

The first president was Benjamin Silliman who served until 1836, when he was succeeded by Eli Ives.

William Tully served as president from 1837 through 1839, and was succeeded by Eli Ives who served from 1840 to 1856. The organization became inactive about the year 1842 and not another meeting was held until about the year 1857, when the Society was revived.

Among the active members in the reorganization were W. P. Blake, C. H. Hitchcock, O. C. Marsh, D. C. Eaton, G. J. Brush, Edward Norton, all subsequently eminent in their respective branches of natural history.

The last recorded meeting according to the ''Records'' seems to have been held May 23, 1857. The Society during its active career had a large domestic and honorary membership. The papers read before the Society were all published in the AMERICAN JOURNAL OF SCIENCE (1818); see below PAPERS ON NATURAL HISTORY.

Benjamin Silliman, Jr., and James Dwight Dana, both served as secretaries for the Society for a time. Much of the ''Records'' was written by them. The Society gradually built up a large collection of specimens, and a library of books on natural history.

Brief accounts of the formation and subsequent history of the Society may be found in the Amer. J. Sc. v. 30, p. 187. Apr., 1836; & in v. 34, p. 397–98. July, 1838.

The collections made by Charles U. Shephard in his survey of Connecticut were deposited in the rooms of the Society. See also CONN. GEOL. SURV. (1835).

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In v. 30, no. 2, p. 275–300. July, 1836.

Dana, J. D., and Whelpey, J. D. On two American species of the genus Hydrachna. Rd May 5.
In v. 30, no. 2, p. 345–59, 1pl. July, 1836.

Dana, J. D., and Herrick, E. C. Description of the Argulus catostomi, a new parasitic crustaceous animal . . . Rd June 2 & Aug. 4.
In v. 31, no. 2, p. 297–308, 1 pl. Jan. 1837.

1837 Dana, J. D. On the identity of the Torrelite of Thomas with Columbite. Rd Feb. 21.
In v. 32, no. 1, p. 149–53, illus. Apr. 1837.

Hall, James. Descriptions of two species of Trilobites belonging to the genus Paradoxides. Rd Mar. 21.
In v. 33, no. 1, p. 139–42, illus. Oct. 1837.

Dana, J. D. Crystallographic examination of Eremite. Rd June 19.
In v. 33, no. 2, p. 70–5, illus. Oct. 1837.

1838 Pickering, Charles, and Dana, J. D. Description of a crustaceous animal, belonging to the genus Caligus; C. Americanus. Rd Feb. 20.
In v. 34, no. 2, p. 225–66, 3 pl. [25fig.] July, 1838.

1841 Redfield, W. C. Short notices of American fossil fishes. Rd Apr. 28.
In v. 41, no. 1, p. 24–8. July, 1841.

Hentz, N. M. Description of an American spider, constituting a new sub-genus, of the tribe Inaequitalae of Latreille. Rd Apr. 28.
In v. 41, no. 1, p. 116–17. July, 1841.

Herrick, E. C. A brief preliminary account of the Hessian fly, and its parasites. Rd Apr. 28.
In v. 41, no. 1, p. 153–58. Oct. 1841.

1842 Linsley, J. H. A catalogue of the Mammalia of Connecticut, arranged according to their natural families, furnished for the Society . . . Rd in April.
In v. 43, no. 2, p. 345–54. Oct. 1842.

1843 ————. A catalogue of the Birds of Connecticut, arranged according to their natural families . . . for the Society.
In v. 44, no. 2, p. 249–74. Apr. 1843.

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In v. 46, no. 1, p. 37–51. Jan. 1844.

1844 ————. Catalogue of the Fishes of Connecticut, arranged according to their natural families, prepared . . . for the Society.
In v. 47, no. 1, p. 55–80. July, 1844.

1845 ————. Catalogue of the Shells of Connecticut prepared for the Society . . .
In v. 48, on. 2, p. 271–86, illus. Apr. 1845.

CONNECTICUT GEOLOGICAL SURVEY (1835)

History

"The Geological and Mineralogical Survey of the State of Connecticut was first suggested by Governor Henry W. Edwards in his Annual Message for 1835. The Legislature, in accordance with his recommendation, made an appropriation, in the session of that year, for that object. I was invited by Governor Edwards to engage in the Geological department of that survey, in connection, with Prof. C. U. Shephard, in the Mineralogical department.

"During the summer of that year, I travelled, with Prof. Shephard, through every town in the state, but the short period then allowed me, only enabled me to a general preparatory reconnoissance; an additional appropriation for the continuance of the survey was made by the Legislature in the session of 1836. I then commenced, by myself, a regular plan of survey, by sections across the state, from East to West, at average intervals of four miles. This I accomplished in nearly eight months constant travel.

"In the session of 1837, a further appropriation was made to enable me to complete the Survey, after having prepared a Report of my previous explorations. This Report I completed and submitted Jan. 1, 1838. . . ." PERCIVAL, J. G. Report. 1842. p. 3–4. (See Reports below).

Shephard and Percival received their appointments on June 15, 1835. Shephard's "Report" was rendered May 15, 1837, for which five hundred dollars was appropriated and 2000 copies printed.

Percival's "Final Report" was submitted in 1842, for which fifteen hundred dollars was appropriated, and 1000 copies printed.

A large number of the specimens collected by the Survey were deposited in the Cabinet of the Yale Natural History Society (1834), q. v.

The Amer. J. Sc., v. 28, no. 2, p. 381–82. July, 1835, contains an announcement of the contemplated survey.

For a critical discussion of the geological and mineralogical phases of the Survey, see MERRILL, (1), p. 329–30. (See Annot. Bib.) There is also a brief history in HAYES, p. 29–30. See also MERRILL, First 100 yrs Amer. Geol. 1924. p. 168–70.

The cost of the Survey was $5,000 (according to Merrill, see Bibliography: 1920, below).

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p. 3– 5	Abstract of Gov. Edward's Message; Letter of appointment, etc.
p. 7– 12	Shephard's Report to his Excellency, Gov. Edwards.
p. 13–117	Economical Report.
p. 118– 52	Scientific Report.
p. 153– 86	Descriptive catalogue of the samples collected for the illustration of the geology and mineralogy of the state.
p. 187– 88	Index.

1842 PERCIVAL, James G[ates]. Report on the geology of the state of Connecticut . . . published under the direction of the Commissioners appointed by the Legislature. New Haven, Osborn & Baldwin, printers, 1842. 495 p. map.

This constituted the geological report.

Rev. in Amer. J. Sc. v. 44, no. 1, p. 187–88. Jan. 1843. Also rev. in Soc. Geol. de France. Bull. v. 14, p. 622–28. 1843.

See also Gregory, p. 54–5 (Bibliog. above).

DODGE EXPEDITION TO THE ROCKIES (1835)

History

Under orders from the Secretary of War, Col. Henry Dodge conducted an expedition of dragoons from Fort Leavenworth on May 29, 1835, to the Rocky Mountains, returning to the same place on Sept. 16, of the same year. The object of the expedition was primarily a study of the conditions of the then American frontier, and of the Indians of the region.

A brief report, containing observations on the regions traversed was submitted Feb. 27, 1836, and published the same year. Dodge's chief assistants were Lt. G. Kingsbury and Dr. Fellows, assistant surgeon.

Report

1836 DODGE, Henry. Report of the Secretary of War, in compliance with a resolution of the Senate, transmitting a Report of the Expedition of the Dragoons, under the command of Col. Henry Dodge, to the Rocky Mountains, during the summer of 1835. . . . Washington, 1836. 37 p. map. (In U. S. 24th Cong., 1st sess., H. Ex. Doc. v. 4, no. 181) Serial no. 289.

FEATHERSTONHAUGH RECONNOISSANCE OF THE COTEAU DE PRAIRIE (1835)

History

Instructions for a survey of the elevated ridge dividing the Missouri from the St. Peter's River were issued to George William Featherstonhaugh, dated July 7, 1835. Work was begun soon after, and an official report rendered to Lt. Col. J. J. Abert of the Topographical Engineers, April 22, 1836. W. W. Mather accompanied the expedition but through some misunderstanding with the leader, left the party (see Amer. J. Sc. v. 33, p. 205–6. Oct. 1837)

For a review of the critical aspects of the geology of the Report, see MERRILL, (1), p. 323–, 325–26. (See Annot. Bib.) See also MERRILL. First 100 yrs Amer Geol. 1924. p. 164–65.

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1836 FEATHERSTONHAUGH, G[eorge] W[illiam]. Report of a geological reconnoissance made in 1835, from the seat of government by the way of Green Bay and the Wisconsin territory to the Coteau de Prairie, an elevated ridge dividing the Missouri from the St. Peter's River. Washington, Gales & Seaton, 1836. 168 p. [20 fig]. 4 pl. fold. map. (In U. S. 24th Cong., 1st sess., Sen. Doc. v. 4, no. 333) Serial no. 282.

Rev. in Amer. J. Sc. v. 32, p. 185–86. April, 1837.

CONTENTS:

p. 1– 94	The basic principles of geology.
p. 95–159	Reconnoissance from Washington to the Coteau de Prairie.
p. 161	Geological glossary.
p. 163– 68	Index.

1872 MATHER, William W[illiams]. Letter from . . . on his travels with Featherstonhaugh through Wisconsin in 1835. (In Minn. Hist. Soc. Coll. v. 1, p. 133–34. 1872)

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MAGAZINE OF HORTICULTURE AND BOTANY (1835)

History

In 1835, C. M. Hovey and B. P. Hovey, Jr., published the first number of the AMERICAN GARDENER'S MAGAZINE, which appeared in January. The magazine was a monthly and devoted primarily to agriculture and horticulture, with occasional articles on botanical subjects.

In January, 1837, the magazine was renamed THE MAGAZINE OF HORTICULTURE & BOTANY, and up to 1866, thirty-one volumes had been published, during which period C. M. Hovey remained its chief editor. The magazine continued to remain a monthly and its subscription price was three dollars a year. Below are given the botanical and other papers to be found in the 31 volumes published prior to 1866.

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Continued as (2).

(THE) MAGAZINE OF HORTICULTURE, BOTANY, and all useful discoveries and improvements in rural affairs; ed. by C. M. Hovey. Boston, Jan. 1837–69. 32 v.

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1851 **v. 17 (2nd ser. v. 7), no. 6, June.**

Harris, T. W. Insects injurious to vegetation; the currant-tree borer. p. 241–44.

1852 **v. 18 (2nd ser. 8), no. 3, March.**

Russell, J. L. Apparent spontaneity of a growth of white birch (Betula populifolia) with remarks on the adaptedness of certain trees to our poorer soils. p. 97–105.

v. 18, no. 5, May.

Russell, J. L. Mountain and forest rambles. p. 193–206.

v. 18, no. 6, June.

Richardson, E. S. L. The spring of 1852, in Illinois, with a list of the earliest flowering plants, and their period of blooming, from 1847 to 1851. p. 248–50.

Hovey, C. M. Descriptions of ten new Verbenas. p. 260–62.

v. 18, no. 8, August.

Hovey, C. M. Descriptions of twenty-six new varieties of herbaceous peonies. p. 360–63.

v. 18, no. 11, November.

R[ussell], J. L., Clapp, A. H., and Frost, C. C. Some of the rarer plants of Vermont. p. 481–85.

v. 18, no. 12, December.

Russell, J. L. Some plants seen about the region of the Notch. p. 531–38.

1853 **v. 19 (2nd ser. v. 9), no. 6, June.**

Hovey, C. M. Description of eighteen new species of Verbenas. p. 266–68.

v. 19, no. 7, July.

————. The shrubs of America. p. 289–92.

v. 19, no. 11, November.

————. Our American oaks. p. 481–86.

1854 **v. 20 (2nd ser. v. 10), no. 2, February.**

————. The trees and shrubs of California. p. 49–53.

v. 20, no. 3, March.

Flagg, Wilson. On the means of multiplying the smaller birds around our dwellings. p. 158–65.

v. 20, no. 5, May.

[Hovey, C. M.] The hardy magnolias. p. 201–9.

Russell, J. L. Introduction of native trees and shrubs into artificial planting. p. 219–28.

v. 20, no. 6, June.

H[ovey, C. M.] The production of plants by hybridization. p. 249–57.

v. 20, no. 7, July.

Flagg, Wilson. The flowerless plants. p. 300–9.

v. 20, no. 8, August.

————. The singing birds and their songs. p. 350–57.

v. 20, no. 9, September.

————. Changes in the aspect of the country and its vegetation on the coast between Massachusetts and South Carolina. p. 399–410.

v. 20, no. 10, October.

[Hovey, C. M.] Our neglected American trees. p. 441–45.

v. 20, no. 11, November.

————. Our neglected shrubs. p. 489–92.

v. 20, no. 12, December.

Flagg, Wilson. Sounds from inanimate nature. p. 543–49.

1855 **v. 21 (3d ser. v. 1), no. 1, January.**

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Hovey, C. M. The Deutzia gracilis. p. 26–8, illus.

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v. 21, no. 3, March.

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v. 21, no. 5, May.

[Hovey, C. M.] Vines and climbing plants. p. 209–14.

Allen, J. F. The great water lily of America. p. 226–34.

Russell, J. L. Remarks on a species of Arctotis. p. 234–37.

v. 21, no. 9, September.

Harris, T. W. The measure-worm. p. 418–23.

v. 21, no. 10, October.

Flagg, Wilson. Rocks. p. 454–59.

————. On the plumage of birds. p. 480–86.

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————. The flowers of autumn. p. 534–38.

1856 **v. 22 (3d ser. v. 2), no. 1, January.**

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Flagg, Wilson. Our native pines. p. 86–93.

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v. 22, no. 5, May.

Flagg, Wilson. Our American firs and spruces. p. 238–46.

v. 22, no. 6, June.

————. The European and American larches. p. 269–73.

v. 22, no. 7, July.

————. The juniper, the white cedar and the aborvitae. p. 316–22.

v. 22, no. 8, August.

————. The chestnut and the beech. p. 364–69.

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————. The hickories. p. 419–25.

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————. The buttonwood. p. 459–63.

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1857 **v. 23 (3d ser. v. 3), no. 1, January.**

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v. 23, no. 3, March.

Flagg, Wilson. The cherries (Cereus). p. 131–35.

v. 23, no. 4, April.

————. The poplars (populus). p. 170–75.

v. 23, no. 5, May.

[Hovey, C. M.] The hardy evergreen trees. p. 193–99.

Flagg, Wilson. The willow. p. 221–24.

v. 23, no. 6, June.

————. The oak. p. 265–69.

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————. The whortleberries. p. 343–54.

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————. The maple. p. 403–7.

1858 **v. 24 (3d ser. v. 4), no. 1, January.**

Russell, J. L. The botanical and horticultural literature of the olden times. p. 21–7, 113–22, 168–76, 208–12.

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v. 24, no. 5, May.

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v. 24, no. 8, August.

Russell, J. L. Rambles among the plants of Essex County, Mass. p. 356–65.

Flagg, Wilson. New England shrubs (Azalea and its allied species). p. 375–79.

v. 24, no. 9, September.

————. The odors of vegetation. p. 400–4.

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v. 24, no. 10, October.

Flagg, Wilson. The New England shrubs (the sumachs). p. 464–67.

v. 24, no. 11, November.

[Hovey, C. M.] The herbaceous peonies. p. 489–94.

Flagg, Wilson. New England shrubs—the viburnum and the elder. p. 517–21.

v. 24, no. 12, December.

Russell, J. L. The introduction of new seeds. p. 542–52.

Flagg, Wilson. New England shrubs. p. 555–62.

1859 **v. 25 (3d ser. v. 5), no. 1, January.**

X. Coniferae. p. 17–20.

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————. On certain native plants used as substitutes of the tea plant. p. 215–18.

v. 25, no. 6, June.

Hovey, C. M. The characteristic form of pear trees. p. 241–49.

v. 25, no. 9, September.

———. Tritonia and tritoma uvaria. p. 402–7.

v. 25, no. 12, December.

———. Mandeville suavedens. p. 548–50, illus.

1860 **v. 26 (4th ser. v. 1), no. 1, January.**

Flagg, Wilson, The cactus tribe. p. 14–8.

v. 26, no. 2, February.

———. The mallows and banana trees. p. 73–8.

v. 26, no. 3, March.

———. Motions and sensibility of plants. p. 104–8.

Hovey, C. M. The picturesque begonias. p. 131–36.

v. 26, no. 4, April.

———. Annual flowers. p. 159–63.

Flagg, Wilson. The mimosa form. p. 164–69.

Hovey, C. M. The Yuccas. p. 169–72, illus.

v. 26, no. 6, June.

Flagg, Wilson. Medical properties of plants. p. 245–51.

v. 26, no. 7, July.

———. The heath form. p. 309–13.

v. 26, no. 8, August.

Hovey, C. M. Yucca stricta. p. 371–73, illus.

v. 26, no. 9, September.

Flagg, Wilson. The lily form. p. 403–7.

1861 **v. 27 (4th ser. v. 2), no. 1, January.**

Hovey, C. M. The Gazania splendens and double zinnia. p. 38–42, illus.

v. 27, no. 4, April.

Russell, J. L. The ferns as cultivated plants. p. 173–80.

v. 27, no. 5, May.

Flagg, Wilson. The palm and the pine forms. p. 214–17.

v. 27, no. 8, August.

Harris, T. W. The cucurbitaceous plants. p. 348–51.

v. 27, no. 9, September.

[Hovey, C. M.] Variation in plants. p. 385–91.

————. Is the heath a native plant? p. 419–21.

1862 **v. 28 (4th ser. v. 3), no. 1, January.**

Flagg, Wilson. On the value of certain insects. p. 15–21.

Hovey, C. M. Our hardy herbaceous plants. p. 37–40, 91–3, 137–38, 329–31, 378–79, 422–24, 458–60, 554–55.

v. 28, no. 4, April.

————. The production of new plants. p. 145–49.

v. 28, no. 5, May.

————. The history and progress of breeding new plants. p. 193–99.

v. 28, no. 8, August.

————. The peonies. p. 337–42.

Hunnewell, H. H. Remarks on Rhododendrons and some of the new evergreens. p. 371–77.

v. 28, no. 9, September.

Wetherell, Leander. The American Rhododendron. p. 402–8.

1863 **v. 29 (4th ser. v. 4), no. 4, April.**

Hovey, C. M. Tagetes signata pumila. p. 157–59.

v. 29, no. 11, November.

Flagg, Wilson. Some remarks on weeds. p. 411–17.

1865 **v. 31 (5th ser. v. 1), no. 4, April.**

Jaques, George. Evergreens. p. 108–15.

Hovey, C. M. The Wigandia. p. 122–24.

NATURAL HISTORY SOCIETY OF HARTFORD, CONN. (1835)

History

The NATURAL HISTORY SOCIETY OF HARTFORD, Connecticut, was organized on October 8, 1835. Its officers were the Rev. Samuel Farmar Jarvis, president; Abraham Halsey, corresponding secretary, and J. P. Brace and Silas Totten, curators. In 1836, it issued its first and only number of the Transactions.

Other curators of the Society were J. A. Taintor, E. P. Terry, Henry Holmes and Abraham Halsey.

In 1845, the name of the Society was changed to the CONNECTICUT SOCIETY OF NATURAL HISTORY, and incorporated in that year by Charles H. Olmsted, John L. Comstock, Joseph

Monds, William W. Turner, and Henry W. Terry. The Society remained in existence until 1873. Its collections were turned over to Trinity College. During the life of the organization they were kept in the Wadsworth Athanaeum.

Presidents

1835–40 Samuel F. Jarvis.
1841–53 Charles H. Olmsted.
1853–73 William W. Turner.

Its secretaries were: 1835–43, Erastus Smith; 1844–46, Henry W. Terry; 1847–53, Erastus Smith; 1854–56, William S. Lawrence; 1857–58, John L. Comstock; 1859–73, George B. Hawley.

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1889 ANON. The Connecticut Society of Natural History. Hartford, Conn., 1889. (In Conn. Hist. Soc. & Associated Institutions. p. 65–6)

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1835 HARRIS, T. W. Characteristics of some previously described North American coleopterous insects, and descriptions of others which appear to be new, in the collection of Mr Abraham Halsey. p. 65–91, 1 pl. Com. Dec. 23.

1836 JARVIS, S. F. An address to the citizens of Hartford, on the birth-day of Linnaeus: May 24, 1836, in behalf of the objects of the Natural History Society, formed October 8, 1835. p. 1–64. Rd May 24.

The Address also rd before Nat. Hist. Soc. Wesleyan Univ. (1835), Middletown, Conn., July, 1836.

Interesting survey of the state of natural history in the U. S. & Europe up to 1836. Makes an eloquent appeal for the formation of a cabinet, botanic garden, library, etc., in Hartford, in connection with the Society.

Copy of Trans. examined in Library, Amer. Mus. Nat. Hist., N. Y.

NEW JERSEY GEOLOGICAL SURVEYS (1835)

History

"The first geological survey of New Jersey, commonly known as the Rogers survey was authorized by act of the legislature, dated Feb. 26, 1835. H. D. Rogers, professor of geology in the University of Pennsylvania, was appointed to make the survey. Reports of progress were presented in 1836, 1837 and 1838, and a Final Report was published in 1840, the latter an octavo volume of 301 pages, with a geologic map of the state on a scale of 6 miles to the inch and two cross-sections. The more important geologic periods were recognized and their formations mapped and described, emphasis being given to the economic products. The total amount appropriated was $5,000, and the work of the Survey terminated with the submission of the Final Report.

''In January, 1854, Gov. R. M. Price recommended that a thorough geologic survey of the state be authorized. This was done in March of the same year, and Dr. William Kitchell was appointed superintendent and state geologist; Dr. George H. Cook, assistant geologist; Dr. Henry Wurtz, chemist and mineralogist; and Gen. E. L. Viele, topographic engineer.

''The law provided for a thorough geologic survey by townships, with county reports. Work was carried on in 1854, 1855 and 1856, and annual reports for these years with a report on the geology of Cape May County, were published. Good progress had been made, particularly in determining the distribution and character of the iron ores, marl and clay deposits and more or less topographic work had been completed in 8 of the 21 counties of the state, when the work was suspended. A total of $49,000 was appropriated during these three years, but owing to the poor condition of the state's finances, only a portion of this was ever available and the survey died of financial starvation, leaving much work in an unfinished condition.

''In 1860 the State Agricultural Society secured the passage of an Act by which Dr. Kitchell was allowed free use of all material and data collected by his survey, for the purpose of publishing a final report and map at his own financial risk. Owing to Dr. Kitchell's death in 1861, nothing resulted from this legislation.

''In 1863 the same Society secured the passage of a law authorizing its officers to receive all the survey material and data, which were to be transferred to Dr G. H. Cook or some other suitable person, with a view of completing the survey as contemplated in the agreement with Dr Kitchell. Under this authorization some work was done in 1863, with results so satisfactory that in 1864 Dr Cook persuaded the Legislature to establish a new Survey, which has since been continuously maintained.'' Extracts from HAYES, p. 90–1.

For a list of the documents relating to the State Surveys to be found in the State's Collection of Documents, see HASSE, (2), 1915 (N. J.), p. 350–58. See also MERRILL, (1), p. 326–27, 460, 523, (see Annot. Bib.) for criticism of the Reports, etc. See also MERRILL, First 100 yrs. Amer. Geol. 1924. p. 165–66, 336–38, 421–22.

John C. Smock was assistant geologist to Cook; and among the other assistants to Kitchell and Cook were J. Morris, C. C. Abbott, D. T. Reiley, David Murray, T. B. Brooks, Thomas Beesley, Samuel Ashmead. James Hall, S. F. Baird, and Joseph Leidy also contributed to the Reports. P. D. Knieskern contributed a botanical Report.

For a detailed history of the various state surveys up to 1885, see Merrill (Bibliography: 1920, below).

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VIRGINIA GEOLOGICAL SURVEY (1835)

History

The Virginia Geological Survey had its origin in an Act of the state legislature, dated March 6, 1835, appointing William Barton Rogers to make a geological reconnaissance of the state of Virginia. Rogers served from 1835 to the close of 1841 and rendered seven annual reports (q.v. below). The Survey was brought to a close by the repeal of the original act of authorization in 1842.

During the period of the Survey, Rogers was assisted by G. W. Boyd, Caleb Briggs, E. A. Aikin, C. B. Hayden, Samuel Lewis, J. B. Rogers, H. D. Rogers, R. E. Rogers, Thomas S. Ridgway, M. Wells and I. Slade.

A reprint of Rogers' Reports appeared in 1884 (see Bibliography, 1884, below). For a brief account of the Rogers survey, see also HAYES, p. 144–45. For a critical estimate of the geological activities of the Survey, see also MERRILL, (1), p. 341–43. (See Annot. Bib.). See also MERRILL. First 100 yrs. Amer. Geol. 1924. p. 183–87.

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1837 ———. Report of the progress of the Geological Survey of Virginia for the year 1836. Richmond, 1837. 14 p.

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WESTERN ACADEMY OF NATURAL SCIENCES, CINCINNATI (1835)

History

"In April, 1835, the Western Academy of Natural Sciences was organized and soon after it was located in the building of the Cincinnati College. This Society had about 50 members and many correspondents, and immediately began the collection of specimens of objects of natural history.

"Its president was Robert Buchanan, and among its officers were John P. Foote, Mr Dorfeuille, John Locke and J. L. Riddell (the last two, curators) . . . The catalogue of flowering plants was prepared by Joseph Clark . . .

"Its quarters were moved from time to time; to the Trollopean Bazaar where it was the guest of the Ohio Mechanics' Institute, afterwards to the hall of a fire company, and finally back to the college building. . . . As time passed, however, the Academy seemed to lose its popularity, and Mr Foote in 1855 speaks of it as being in danger of soon belonging like the Academy of Fine Arts to airy nothing. Although the Cabinet and library were no longer growing, a number of private cabinets were increasing, some rich in specimens. Among those specially mentioned were the cabinets of David Christy, Dr John Locke, J. G. Anthony, Joseph Clark, Robert Clarke, George Graham, H. C. Grosvenor, U. P. James, S. T. Carley, Prof. Ward, and Robert Buchanan . . .'' GREVE, 1904. p. 903 (See, below, Bibliography: 1904).

A notice of the organization of the Society, on April 25, 1835, may be found in the Western Journal of the Medical & Physical Sciences. v. 9 (ser. 2, v. 3), p. 155–56. June, 1835. On February 5, 1836, a charter was granted to the Academy by the state of Ohio. The Academy also received the collections of a former Cincinnati organization, the WESTERN MUSEUM SOCIETY (1818), q.v.

A list of the most active members of the Academy may be found in ''A History of Cincinnati & Hamilton Co.,'' 1894, p. 151–52, published by Nelson & Company. Its collections and library of 265 volumes were turned over on Sept. 5, 1871, to the present Cincinnati Society of Natural History.

Officers in 1856 were, according to the American Journal of Science, v. 72 (ser. 2, v. 22), p. 150, July, 1856, U. P. James, president; George Graham, vice-president; James H. C. Grosvenor, Robert Clarke, and S. T. Carley, curators.

The Academy had no publication of its own, but published its papers either in the AMERICAN JOURNAL OF SCIENCE (1818), or as separates. See below PAPERS ON NATURAL HISTORY.

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WILLIAMS COLLEGE LYCEUM OF NATURAL HISTORY (1835)

History

"It is now more than a quarter of a century since an association was formed here, having the promotion of the natural sciences for its object. This Association was called the LINNAEAN SOCIETY. Its records are lost, having been probably consumed with the East College. Some of its members are well known as zealous prosecutors of natural science. It will be sufficient to mention the names of the Rev. Dr M. A. Curtis, and Prof. John Darby . . .

"In the year 1835, the old Linnaean Society was reorganized or rather, perhaps it is more proper to say, a new Society was formed, a new constitution adopted and a new name assumed: the WILLIAMS COLLEGE LYCEUM OF NATURAL HISTORY . . .

"In the same year, as promotive of the general objects of the Lyceum, it was proposed to take an expedition, and with a view to combine to as great an extent as possible, variety of scenery and rare mineral productions, it was determined to visit and explore the Bay of Fundy. A vessel was accordingly chartered and the Expedition sailed from Boston in the month of August. This Expedition was highly successful. It not only brought much useful experience to the members of it but a valuable accession to the Cabinet of the Society." (For the Account of the Expedition, see below: PAPERS ON NATURAL HISTORY: 1836: Emmons).

The Society built up a library and a museum, a catalogue of which, including the names of officers and members was published in 1852 by A. B. Whipple. See PAPERS: 1852, below).

The extracts above are taken from WHIPPLE, p. 4–5. 1852.

Ebenezer Emmons, Chester Dewey and President Mark Hopkins were actively associated with the Lyceum for many years. The Lyceum also made trips to Berkshire County localities in 1840, to Newfoundland in 1855, to Florida in 1857, and to Greenland in 1860. It was in many respects the most active College natural history society of the pioneer century.

The account of the Florida Expedition will be found below under LYMAN & ELMORE (see PAPERS: 1856). The Society celebrated its semi-centennial in 1885.

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CUVIERIAN OR NATURAL HISTORY SOCIETY OF WESLEYAN UNIVERSITY, MIDDLETOWN, CONN. (1836)

History

"This Society was formed on April 18, 1836, and although it has existed but a few years, it has made mineralogical, botanical and zoological collections . . . It has about fifty members." BARRATT. p. 563 (see Bibliography: 1841).

The officers of the Society in 1842 were Joseph Barratt, of Middletown, Conn., president; B. F. Mudge, recording secretary; John Johnston, corresponding secretary; C. D. Burr, curator. The Society was composed of Juniors and Seniors and had some honorary members. It seems to have expired in the late forties or early fifties. Its collections were eventually turned over to the present Judd Museum. Below are given several papers read before the Society.

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GEORGIA GEOLOGICAL SURVEY (1836)

History

''The first effective effort toward the establishment of a Geological Survey of Georgia had its beginning in Governor Schley's message to the General Assembly in 1836 . . . The Governor in discussing the internal improvement of the state wrote as follows:

'Intimately connected with this subject is that of the geological structure of the state and its mineral resources. A proper knowledge of these is necessary to a prudent and profitable location of canals and railroads and should have its influence in directing their course. Thus far Georgia has scarcely looked beneath her surface and her great staple commodity has been the only article of transportation within the contemplation of those who have projected schemes of internal improvement, whilst the advantage to be derived from geological investigation has been entirely overlooked. In such a survey the whole state is interested, not merely in the increased variety of its products, but in the promotion of the most efficient culture by disclosing the character and capacity of the soil. Her territory, particularly that part comprehended within the Cherokee circuit, is believed to abound in mines of gold, marble, iron, limestone, salt and other valuable minerals. These concealed treasures, which should be made tributary to her knowledge and wealth, are worthy of your enlightened consideration and the provision necessary to a full and scientific examination of them ought not to be longer delayed. I suggest therefore, the propriety of employing a competent geologist to make a thorough survey of the state, with a view to the ascertainment of its mineral and agricultural resources and the proper location of works of internal improvement.'

''Gov. Schley supplemented the foregoing recommendation by the following note:

'Since the above was written, I have received from Mr John R. COTTING, a letter dated at Augusta on the 15th ultimo accompanied by a Report of a geological and agricultural examination made by him, during the past summer of the counties of Burke and Richmond. This survey was executed at the expense of the individuals of these counties and is highly creditable to their public spirit, and as far as I can judge, equally so to the skill and capacity of Mr Cotting as a scientific and practical geologist.'

"On Nov. 26, 1836, the legislature authorized the Governor to employ a properly qualified person to undertake a survey of the counties of the state. It appropriated $10,000 for the purpose.

"Under the resolution above referred to, Gov. Schley appointed John R. Cotting state geologist. His first annual Report to the General Assembly was made in 1837. It covered more or less completely the counties of Chatham, Columbia, Effingham, Screven, Richmond, Burke, Lincoln, Elbert, Franklin, Habersham, and parts of Wilkes and Oglethorpe. The Report was never published. In 1839 a resolution for the abolition of the Survey was introduced 'on the ground that it had spent all of the $10,000 appropriated to carry on the work without any benefit whatever to the citizens of the state.' It was therefore discontinued in 1840." Extracts from HAYES, p. 36–8. (See Annot. Bib.).

A history of state surveys in Georgia up to 1885 may be found in Merrill (see Bibliography: 1920, below).

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MAINE GEOLOGICAL SURVEYS (1836)

History

"By act of the state legislature dated March 28, 1836, a geologic survey of the state of Maine was authorized. Charles T. Jackson was appointed state geologist. The investigation was continued during the following three years. The published results, considering the difficulties of transportation at that time and the non-existence of accurate maps are interesting. They include three annual reports entitled 'Geology of the State of Maine' and dated 1837, 1838 and 1839; a Report entitled 'Report of an exploration and survey of the territory of the Aroostook River;' and a Report entitled: 'Second annual Report of the geology of the public lands belonging to the two states of Maine and Massachusetts. The state appropriated $5,000 for the survey.'

"By act of March 16, 1861, a detailed survey of Maine was authorized, and a report of the natural history and geology of the state was made by C. H. Hitchcock, geologist, and Ezekiel Holmes, naturalist . . ." Extracts from HAYES, p. 63. (See Annot. Bib.).

Jackson's assistants were James T. Hodge for Massachusetts, and Dr. T. Purrington for Maine.

The assistants for the 1861 survey were G. L. Goodale, botanist and chemist; John C. Houghton, mineralogist; A. S. Packard, Jr., entomologist, and C. B. Fuller, marine zoologist. G. L. Vose, N. T. True, John De Laski, Oliver White, L. W. Bailey assisted in minor capacities. See also MERRILL, (1), p. 290, 346–47, 511–12, (see Annot. Bib.) for critical discussion. For documents in state collection, see HASSE, (2), 1907, p. 73. See also MERRILL. First 100 yrs. Amer. Geol. 1924. p. 189–91, 404–5.

Reports were also made by S. L. Stephenson to Jackson in 1839; and by P. A. Chadbourne, N. S. Manross, J. G. Rich, B. F. Fogg, A. E. Verrill, J. W. Dawson, and Forrest Shepherd, to Messrs Holmes & Hitchcock, 1862–63.

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THE NATURAL HISTORY SURVEY OF NEW YORK (1836)

History

"In 1835, the Assembly of this state, upon the motion of Charles P. Clinch, a representative from New-York, passed a resolution directing the Secretary of State to report to the legislature at its next session, the most expedient method for obtaining a complete geological survey of the state, which would furnish a perfect and scientific account of rocks and soils and their localities, and a list of all its mineralogical, botanical and zoological productions, and for procuring and preserving specimens of the same, with an estimate of the expense of the undertaking.

"John A. Dix, Secretary of State, in January, 1836, submitted a Report in pursuance of this resolution (see Bibliography, 1836, below). That luminous, satisfactory document led to the passage of the act of the 15th of April, 1836, in the execution of which, and of the acts of May 8, 1840, and of April 9, 1842, the Survey has been made. It may be stated with just pride that the law of 1836 appropriating the sum of one hundred and four thousand dollars ($104,000) to the Survey was passed by the Assembly unanimously. A further appropriation of twenty six thousand dollars ($26,000), was made by the law of 1842.

"William L. Marcy, governor, arranged the plan of the Survey in the summer of 1836, and assigned its departments as follows: the zoological department to James E. De Kay; the botanical to John Torrey; the mineralogical and chemical to Lewis C. Beck; the geological department to William W. Mather, Ebenezer Emmons, Timothy A. Conrad and Lardner Vanuxem. This arrangement was subsequently altered by the institution of a palaeontological department, under the care of Mr. Conrad, and by the appointment of James Hall to supply his place as a geologist.

"The results of the Survey appear in the following volumes and in eight several collections of specimens of the animals, plants, soils, minerals, rocks and fossils found within the state, one of which collections constitutes a museum of natural history at the capital of the state, and the others are distributed among its collegiate institutions . . ." SEWARD, W. H. Introd. p. 174–75 of v. 1 of the Reports, (see volume by De Kay).

The "Final Reports" of the Natural History Survey of New York were issued in 30 quarto volumes between 1842 and 1894, and widely and generously distributed. Practically all the volumes except the majority of the palaeontological and some of the agricultural volumes appeared during the forties and the early fifties.

Mather was assisted in the first geological district by William Horton, Leonard D. Gale, J. L. Cassels, Caleb Briggs, J. Gebhard, Jr., Henry Green, T. Seymour and F. Merrick.

Emmons in the second geological district was assisted by E. Emmons, Jr., Edwards Hall, Richard Taylor, A. Hopkins, and Messrs Murdock, Benton and Crawe.

Vanuxem in the third geological district was assisted by James Eights and E. S. Carr.

Hall in the fourth geological district was assisted by G. W. Boyd, E. S. Carr, E. N. Horsford.

Emmons who was also in charge of the division of Agriculture was assisted by Ebenezer Emmons, Jr., J. H. Salisbury, L. Chandler Ball, G. H. Smith, Wm. H. Smith, L. F. Allen, David Thomas, H. S. Randal, and Asa Fitch in the entomological section.

Twenty-five volumes were published before the close of the Civil War, and the remaining five between 1867 and 1892.

"The State of New York is the first that has fully carried out the principle of division of labor in the execution of a survey on the natural history of the state under the name of a geological survey. By this arrangement each head of a department of the survey has been enabled to devote his whole time and attention to his own specific duties, without having the entire range of natural science to distract his attention.

"The Survey of New York, unlike that of some other states has been uninfluenced by party and political considerations, and the chief magistrates (Gov. W. L. Marcy & W. H. Seward), during its execution, have been actuated by high and ennobling motives . . . " MATHER, W. W. Div. 4: Geology. v. 1, pt. 1, 1843, pref. p. 10.

For a list of the publications and reports relative to the Natural History Survey of N. Y., which have appeared in the N. Y. State Documents, see HASSE, (2), 1907, pt. 4, p. 420–30.

For critical estimate of the achievements of the Survey see MERRILL, (1), p. 344, 374–81, 499–502, 659–62. (See Annot. Bib.). For an excellent history, see MERRILL, 1920, in Bibliography below. See also MERRILL. First 100 yrs. Amer. Geol. 1924. p. 187–88, 223–35.

The collections made by the various parties in zoology, botany, palaeontology, geology and mineralogy formed the basis of the collection known as the New York State Cabinet of Natural History (1843), q.v., the direction of which was for a time under Emmons, one of the geologists, also in charge of Agriculture. Many of Hall's Palaeontological Reports were also published in the Reports of the Cabinet which was placed under the supervision of the State Board of Regents of the University of the State of New York.

Bibliography

1836 DIX, John A[dams]. Report of the Secretary of State in relation to a geological survey of the state. Albany, 1836. 60 p. (In N. Y. State. Assembly Doc. no. 9, v. 1).

Contains a brief bibliography of publications relating to geology, mineralogy and zoology of the state.

1837 MATHER, W. W., and CONRAD, T. A. Queries proposed by the geologists of the new Survey of the State of New York. (In Amer. J. Sc. v. 33, no. 1, p. 124–33. Oct. 1837).

Also previously issued as a separate. 8 p.

1842 BECK, Lewis C[aleb]. History of the progress of mineralogy in the State of New York. Albany, 1842. (In Nat. Hist. N. Y. Div. 3: Mineralogy. pref. p. 9–12).

DE KAY, James E[llsworth]. Historical progress of ichthyology in the United States . . . Albany, 1842. (In Nat. Hist. N. Y. Div. 1: Zoology. pt. 3: Fishes. pref. p. 3–8).

Rapid survey, with especial emphasis on N. Y.

SEWARD, William Henry. . . . Historical introduction. Albany, 1842. 178 p. (In Nat. Hist. N. Y. Div. 1: Zoology. pt. 1. Introd.)

Reviews the main achievements of the state in the arts and sciences; with a resume of the origin and history of the Survey (see History above.)

1843 TORREY, John. Historical sketch of the progress of botany in New York State. Albany, 1843. (In Nat. Hist. N. Y. Div. 2: Botany. v. 1, pref. p. 1–3).

1844 HALL, James. The Geological Survey of New York: its influence upon the productive pursuits of the community. Albany, 1844.

Rd before N. Y. State Agric. Soc. (1832), in 1843. In its Trans. v. 3, p. 241–78, illus. 27 pl.

1848 ————. On the general results of investigations in the Palaeontology of the lower strata of New York. (In Amer. J. Sc. ser. 2, v. 5, p. 243–49. Mar. 1848).

Originally rd before Amer. Assoc. Geol. & Nat. (1840), Sept. 24, 1847.

1853 NEW YORK STATE CABINET OF NATURAL HISTORY, Albany, N. Y. Catalogue of the Cabinet of Natural History of the State of New York and of the Historical and Antiquarian collection annexed thereto . . . Albany, C. Van Benthuysen, 1853. 248 p. (34 + 61 + 22 + 53 + 28 + 22 p.)

For contents, see N. Y. St. Cab. Nat. Hist. (1843), Bibliography: 1853.

1883 HALL, James. The New York Geological Survey. (In Pop. Sc. Mthly. v. 22, p. 815–25. Apr. 1883).

Historical review, repr. from Public Service State N. Y. 1882. v. 2, p. 367–80.

1889 EMMONS, Ebenezer. Catalogue of the specimens arranged by Prof. E. Emmons, as representatives of the Taconic System, at the close of the Geological Survey of New York in 1843. Albany, 1889. (In N. Y. State Mus. Ann. Rept. for 1888. v. 42, p. 441–44).

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1896 McGEE, W[illiam] J[ohn]. James Hall, founder of American stratigraphy. (In Science. n. s. v. 4, no. 98, p. 700–6, 2 port. Nov. 13, 1896).

CLARKE, John M[ason]. Professor James Hall and the Geological Survey of the Fourth District of New York, 1837–1843. (In Science. n. s. v. 4, no. 98, p. 706–12. Nov. 13, 1896).

STEVENSON, John J[ames]. . . . Certain unwritten chapters in the history of the New York Survey. (In Science. n. s. v. 4, no. 98, p. 714–16. Nov. 13, 1896).

1898 MERRILL, Frederick J[ames] H[amilton]. The Natural History Survey of New York and the origin of the State Museum. Albany, Univ. State N. Y., Nov. 1898. (In N. Y. State Mus. Bull. no. 19, p. 240–45).

1902 ———. History of the New York Geologic Surveys. Albany, Univ. State N. Y., Nov. 1902. (In N. Y. State Mus. Bull. no. 56, p. 5–10).

1903 ELLIS, Mary. . . . Index to publications of the New York State Natural History Survey and New York State Museum: 1837–1902; including other New York publications on related subjects. Albany, Univ. State N. Y., June, 1903. (In N. Y. State Mus. Bull. no. 66. Misc. no. 2, p. 239–653).

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Included in the State Botanist's Report for 1915. Entries chronological under names of counties. Subject index.

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Comprehensive account of the surveys of the state down through 1885.

Annual Reports

Published in the State Documents

1837 First annual report of the Geological Survey of the state, made Feb. 11, 1837. Albany, 1837. 212 p. (In N. Y. State. Assembly Doc. no. 161).

Rev. in Amer. J. Sc. v. 32, p. 186–90. Apr. 1837. 2d ed. also pub. of this Rept.

CONTENTS:

p. 3– 8 MARCY, W. L. Governor's report.
p. 9– 10 TORREY, John. Report of botanical Department.
p. 11– 3 DE KAY, J. E. Report on the zoological Department. (Made Dec. 3, 1836).
p. 15– 60 BECK, L. C. Report on the mineralogical and chemical department. (Made Jan. 25, 1837.)
p. 61– 95 MATHER, W. W. Report of the 1st geological district. (Made Jan. 31, 1837.)
p. 97–153 EMMONS, Ebenezer. Report of the 2d geological district. (Made Feb. 1, 1837.)
p. 155– 86 CONRAD, T. A. On the geological survey of the 3rd district.
p. 187–212 VANUXEM, Lardner, and EIGHTS, James. Report on the 4th geological district.

1838 Second annual report of the geological survey of the state made Feb. 20, 1838. Albany, 1838. 384 p. 10 pl. 2 maps, 3 sect. (In N. Y. State. Assembly Doc. no. 200).

Abstr. & rev. in Amer. J. Sc. v. 36, p. 1–49. Apr. 1839.
Also 2d ed. of this Rept. published.

CONTENTS:

p. 5 DE KAY, J. E. Zoological dept. Feb. 3.
p. 7– 73 BECK, L. C. Mineralogical dept. Jan. 20.
p. 107– 19 CONRAD, T. A. Palaeontological dept.
p. 121– 84 MATHER, W. W. First Geological district. (Made Dec. 14, 1837.)
p. 185–252 EMMONS, E. Report of 2d geological district. (Made Feb. 15, 1838.)

p. 253– 86 Vanuxem, L. Report of 3rd district.
p. 287–374 Hall, James. Report of 4th district.
p. 375– 81 Glossary.

1839 Third annual report of the geological survey of the state, made Feb. 27, 1839. Albany, 1839. 351 p. (In N. Y. State. Assembly Doc. no. 275).

Rev. by O. P. Hubbard in Amer. J. Sc. v. 39, p. 95–108. July, 1840.

Contents:

p. 9– 56 Beck, L. C. On the mineralogical and chemical department. (Made Jan. 26.)
p. 57– 66 Conrad, T. A. Second annual report of the palaeontological department.
p. 67–199 Mather, W. W. Report on the 1st geological district. (Made Jan. 23.)
  p. 135–75 Horton, William. Report on geology of Orange Co.
  p. 177–99 Gale, L. D. On the geology of New York County.
p. 201– 39 Emmons, E. Report of the 2d geological district. (Made Feb. 1.)
p. 241– 85 Vanuxem, L. On the geological survey of the 3rd district.
p. 287–339 Hall, James. Report on the 4th geological district.
p. 340– 47 Glossary.

SEWARD, W. H. Message from the governor, transmitting several reports in relation to the geological survey of the state . . . Albany, 1839. (In N. Y. State. Assembly Doc. no. 406).

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p. 3–21 Torrey, John. Catalogue of plants indigenous to the state of N. Y. (Made May 1.)
p. 23 De Kay, J. E. Letter . . . Apr. 24, 1839.

1840 Fourth annual report of the geological survey of the state made Jan. 24, 1840. Albany, N. Y., 1840. 484 p. (In N. Y. State. Assembly Doc. no. 50).

Rev. by O. P. Hubbard in Amer. J. Sc. v. 40, p. 73–85. Jan. 1841.

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p. 7– 14 De Kay, J. E. Catalogue of the animals belonging to the state of N. Y. as far as they have been figured and described. (Made May 7, 1839.)
p. 15– 36 ————. Report of zoological dept.
p. 37–111 Beck, L. C. Report of the mineralogical and chemical dept. (Made May 25, 1839.)
p. 113– 97 Torrey, John. Report on botanical dept.; p. 117–97 Catalogue of plants.

p. 199–207 Conrad, T. A. Third annual report on the palaeontological department.
p. 209– 58 Mather, W. W. Fourth annual report of 1st geological district. (Made Dec. 27, 1839.)
p. 259–353 Emmons, E. Fourth annual report of the 2d geological district.
p. 355– 88 Vanuxem..... L. Fourth annual report of 3rd geological district. (Appx. by E. S. Carr.)
p. 389–472 Hall, James. Report on 4th geological district.
  p. 457–72 Horsford, E. N. On the geology of Cattaraugus Co.
p. 473– 80 Glossary of technical terms.

1841 Fifth annual report of the geological survey of the state, made Feb. 17, 1841. Albany, 1841. 184 p. (In N. Y. State. Assembly Doc. no. 150).

Contents:

p. 3– 23 Beck, L. C. On the mineralogical and chemical departments. (Made Jan. 28, 1841.)
p. 25– 57 Conrad, T. A. On the palaeontology of the state of N. Y.
p. 59–112 Mather, W. W. On 1st geological district.
p. 113– 36 Emmons, E. On 2d geological district.
p. 137– 47 Vanuxem, L. On 3rd geological destrict. (Appx. by E. S. Carr.)
p. 149– 79 Hall, James. On the fourth geological district.

Final Reports

1842 NATURAL HISTORY OF NEW YORK. Albany, Thurlow Weed; N. Y., Appleton, Wiley & Putnam; Bost. Gould, Kendall & Lincoln, 1842–94. 30 v. illus. pl. maps. sect. diagr. 4.°

Divided into 6 divisions.

Contents:

Division 1. Zoology.

1842 De KAY, James E[llsworth]. Zoology of New York; or, The New York fauna; comprising detailed descriptions of all the animals hitherto observed within the state of New York, with brief notices of those occasionally found near its borders, and accompanied by appropriate illustrations . . . Albany, 1842–44. 5 v. illus. pl.

Rev. in Amer. J. Sc. v. 45, p. 397–99. Oct. 1843.

Contents:

pt. 1 1842. 178 + 13 + 2 + 146 p. 33 pl. [76 fig.]
  Seward, W. H. Historical introduction. 178 p.
  Mammalia. 13 + 2 + 146 p. 33 pl. [76 fig.]
    300 copies with hand-colored plates. Preface written Jan. 1, 1842.

v. 2

pt. 2 1844. 12 + 380 p. 141 col. pl. [308 fig.]
Birds.
Authorities, pref. p. 9–10. Index popular names, p. 357–62; Latin, p. 363–69.

v. 3

pt. 3 1842. 7 + 98 p. 23 pl. [57 fig.] (In Atlas)
Reptiles and Amphibia.
Authorities, pref. p. 5–6.
Pt. 3–4 are bound together.

pt. 4 1842. 15 + 415 p. 79 pl. [250 fig.] (In atlas)
Fishes.
Rev. by D. H. Storer, in Bost. Soc. Nat. Hist. Proc. v. 1, p. 120–23. 1843. (Rd Aug. 1843.)
Preface written, July 1, 1842. Authorities, pref. p. 11–2. Contains ''Historical progress of ichthyology in U. S.'', pref. p. 3–8.

v. 4

pt. 3–4 1842. 102 pl. [317 fig.] (Atlas)
Plates to Accompany v. 3.
300 copies with had-colored plates. See pt. 3 & 4 above.

v. 5

pt. 5 1843. 4 + 271 p. 40 pl. [358 fig.]
Mollusca.
Hand colored plates. Preface dated, Feb. 1, 1844. Authorities, pref. p. 5–6.

pt. 6 1844. 5 + 70 p. 13 pl. [54 fig.]
Crustacea.
Hand colored plates. Authorities, pref. p. 3–4.

Division 2. Botany.

1843 TORREY, John. A flora of the state of New -York, comprising full descriptions of all the indigenous and naturalized plants hitherto discovered in the state: with remarks on their economical and medical properties. Albany, 1843. 2 v. illus. 161 pl. [563 fig.] 4.°

Rev. in Amer. Quart. Jour. Agric. & Sc. v. 5, p. 61–3. Jan. 1847.
v. 1 12 + 484 p. 72 pl. [289 fig.]
v. 2 572 p. 89 pl. [274 fig.] (pl. 73–161.)
Historical sketch of the progress of botany in N. Y. State, v. 1, pref. p. 1–3.
Authorities quoted, pref. v. 1, p. 9–12. Index to v. 1 p. 465–84. Index for v. 1–2, in v. 2, p. 531–72. Preface dated, Dec. 1842.

Division 3. Mineralogy.

1842 BECK, Lewis C[aleb]. Mineralogy of New-York; comprising detailed descriptions of the minerals hitherto found in the state of New York, and notices of their uses in the arts and agriculture. Albany, 1842. 24 + 536 + 4 p. illus. 8 pl. [533 fig.] 4.°

pt. 1, p. 1–167 Economical mineralogy.
pt. 2, p. 169–457 Descriptive mineralogy.
Rev. by J. D. Dana, in Amer. J. Sc. v. 46, p. 25–37. Jan. 1844.
Authorities quoted, pref. p. 15–7. Preface dated Nov. 1, 1842.
Tables of crystalline forms, p. 459–525. Index, p. 527–36.
History of the progress of mineralogy in N. Y. State, pref. p. 9–12.

Division 4. Geology.

1842 MATHER, William Williams, EMMONS, Ebenezer, VANUXEM, Lardner, and HALL, James. Geology of New York. Albany, 1842–43. 4 v. illus. pl. maps. 4.°

These Reports rev. by D. D. Owen, in Amer. J. Sc. as follows:
v. 46, p. 143– 57. Jan. 1844.
v. 47, p. 354– 80, illus. Oct. 1844.
v. 48, p. 296–316, illus. Apr. 1845.
v. 51, p. 43– 70, illus. May, 1846.
v. 53, p. 54–74, 164–71. Jan. & Mar. 1847.

Contents:

v. 1, pt. 1, 1843.

MATHER, William W[illiams]. Geology of New-York; Part 1: comprising the geology of the first geological district. Albany, 1843. 37 + 653 p. 42 col. pl. [383 fig.] 4 maps. 4.°

Preface dated, July 1, 1842 & Sept. 1, 1843.
Pl. 21 & 22, by J. W. Bailey.
For critical review, see Merrill, (1) p. 374–77. (See Annot. Bib.) See also Merrill. First 100 yrs. Amer. Geol. 1924. p. 223–27. Based on a survey of 21 counties in the southern part of the state.

Contents:

p. 1– 3, ch.	1	Introduction.
p. 4–245,	2	Quaternary system.
p. 246– 47,	3	Tertiary deposits.
p. 248– 94,	4	Upper Secondary system.
p. 295– 97,	5	Coal formation.
p. 298–421,	6	New York system.
p. 422–438,	7	Taconic system.
p. 439–515,	8	Metamorphic rocks.
p. 516–604,	9	Primary rocks.
p. 605– 33,	10	Dip and structure of rocks, and general inference from facts.

p. 634–39 Appx.
p. 641–53 Index.

p. 577–80, Appx. F: Horton, William. List of minerals observed in making the examination of the county of Orange.

p. 581–604, Appx. G: Gale, L. D. Diary of a Geological Survey of the Island of N. Y.

v. 2, pt. 2, 1842.

EMMONS, Ebenezer. Geology of New York; Part 2: comprising the survey of the Second geological district. Albany, 1842. 10 + 437 p. illus. 15 pl. [55 fig.] 3 maps. 4.°

Included St. Lawrence, Franklin, Clinton, Essex, Warren, Hamilton and Jefferson Counties. See also MERRILL, (1), p. 377–78, 659–62. Preface dated Jan. 1, 1842. See also MERRILL. First 100 yrs Amer. Geol. 1924. p. 227–29. p. 433–34. Fossils described by James EIGHTS.

v. 3, pt. 3, 1842.

VANUXEM, Lardner. Geology of New York; Part 3: comprising the survey of the Third geological district. Albany, 1842. 306 + [1] p. 80 illus. 4.°

Included Montgomery, Fulton, Otsego, Herkimer, Oneida, Lewis, Oswego, Madison, Onondaga, Cayuga, Cortland, Chenango, Broome, Tioga, and eastern half of Tompkins.

Preface dated Jan. 1, 1842. See also MERRILL, (1), p. 378–79. (See Annot. Bib.) See also MERRILL. First 100 yrs Amer. Geol. 1924. p. 229–30.

v. 4, pt. 4, 1843.

HALL, James. Geology of New-York; Part 4: comprising . . . the Fourth geological district. Albany, 1843. 27 + 683 p. 19 pl. [312 fig.] map. 192 illus. 4.°

Included Wayne, Monroe, Orleans, Niagara, Seneca, Ontario, Yates, Livingston, Erie, Genesee, Chemung, Steuben, Alleghany, Cattaraugus, Chautauqua, and the western part of Tompkins County.

19 pl. contains figures of fossils.

See also MERRILL, (1), p. 379–81. (See Annot. Bib.) See also MERRILL. First 100 yrs Amer. Geol. 1924. p. 230–35.

Division 5. Agriculture.

1846 EMMONS, Ebenezer. Agriculture of New-York; comprising an account of the classification, composition and distribution of the soils and rocks, and the natural waters of the different geological formations; together with a condensed view of the climate and the agricultural productions of the state. Albany, 1846–54. 5 v. illus. pl. 4.°

CONTENTS:

pt. 1, 1846. 11 + 371 p. 21 pl.
SOILS of the state, their composition and distribution.
Preface written Dec. 30, 1846.

pt. 2, 1849. 8 + 343 + 46 p. 42 pl.
ANALYSES OF SOILS, PLANTS, CEREALS.
Preface written Feb. 1, 1849.

pt. 3, 1851. 8 + 340 p. (Atlas–see pt. 4.)
FRUITS.
Preface written Dec. 25, 1851.
pt. 4, 1851. 7 p. 95 col. pl.
Plates to accompany v. 3.
pt. 5, 1854. 8 + 272 + 94 p. 50 col. pl. [562 fig.]
INSECTS INJURIOUS TO AGRICULTURE.
Preface dated July 25, 1854.
Assisted by Asa FITCH.

Division 6. Palaeontology.

1847 HALL, James. PALAEONTOLOGY of New York. Albany, 1847–94. 8 v. in 13, illus. pl. 4.°

For critical estimate of the contents of the volumes, see also MERRILL, (1), p. 499–502. (See Annot. Bib.) See also MERRILL. First 100 yrs Amer. Geol. 1924. p. 230–35.

CONTENTS:

v. 1, 1847. 23 + 338 + 200 p. 100 pl. [457 fig.]
Containing Descriptions of the Organic Remains of the lower division of the New York system.
Preface dated Sept. 1, 1846.
v. 2, 1852. 8 + 362 p. 104 pl. [560 fig.]
Containing Descriptions of the Organic Remains of the lower Middle Division of the New York System.
Rev. in Amer. J. Sc. ser. 2, v. 16, p. 127–28. July, 1853.
Extract in ser. 2, v. 11, p. 398–401. May, 1851 (On new fossil corals).
v. 3, pt. 1, 1859 12 + 532 p.
Containing Descriptions and Figures of the Organic Remains of the Lower Helderberg group and the Oriskany sandstone: text.
pt. 2, 1861 (1855–59), 143 pl. (286 p.)
PLATES.
v. 4, 1867 (March), 11 + [1] + 428 p. 99 pl.
Fossil Brachiopoda of the Upper Helderberg, Hamilton, Portage and Chemung groups.
Work done between 1862 and 1866.
v. 5, pt. 1, v. 1, 1884. 18 + 268 p. 45 pl.
Lammellibranchiata: 1. Monomyaria of the Upper Helderberg, Hamilton and Chemung groups.
pt. 1, v. 2, 1885. 62 + p. 269–561, 51 pl.
Lammellibranchiata: 2. Dimyaria of the Upper Helderberg, Hamilton, Portage and Chemung groups.
v. 5, pt. 2, 2 v. 1879. 15 + 492 p. 120 pl.
Gasteropoda, Pteropoda and Cephalopoda of the Upper Helderberg, Hamilton, Portage and Chemung groups.
v. 1 Text. 15 + 492 p.
v. 2 Plates. 120 pl.
Cont. in v. 7. 1888. 42 p. 18 pl.

v. 6, 1887. 24 + 298 p. 67 pl.
    Corals and Bryozoa of the Lower and Upper Helderberg and Hamilton groups.
v. 7, 1888. 64 + 236 p. 46 pl.
    Trilobites and other Crustacea of the Oriskany, Upper Helderberg, Hamilton, Portage, Chemung and Catskill groups.
    Contains cont. of v. 5, pt. 2 q.v. (above), 42 p. 18 pl. 1888.
v. 8, pt. 1, 1892. 16 + 367 p. 44 pl.
    Introduction to the study of the genera of the Palaeozoic Brachiopoda.
    pt. 2, 1894. 16 + 394 p. 84 pl.
    Palaeozoic Brachiopoda.

NICOLLET'S EXPLORATIONS OF THE UPPER MISSISSIPPI (1836)

History

"Having come to this country for the purpose of making a scientific tour, and with the view of contributing to the progressive increase of knowledge in the physical geography of North America, I determined after having explored the Alleghany range in its various extensions through the southern states, and having ascended the Red River, Arkansas River, and to a great distance the Missouri River, to undertake the full exploration of the Mississippi River from its mouth to its various sources. During the five years that I was engaged in these excursions, I took occasion to make numerous observations, calculated to lay the foundation of the astronomical and physical geography of a large extent of country, and more especially of the great and interesting region between the Falls of St. Anthony, and the sources of the Mississippi. With these labors, I connected also, the study of the customs, habits, manners, and languages of the several Indian nations that occupy this vast region of the country . . ." NICOLLET. Introd. to Rept. (q.v. below).

Joseph Nicolas Nicollet carried on his explorations throughout the seasons 1836–1840 inclusive. He was accompanied part of the time by Lieuts. Fremont and Scammond. At his own expense he engaged Charles Geyer to serve as botanist and to make botanical collections, which in the Report were described by Torrey, (see below).

He entered the government service in 1838; and during 1838 and 1839, he made explorations in Minnesota accompanied by Fremont. He rendered an official Report, dated Sept. 13, 1843, which was translated for the Public Documents by J. T. Ducatel and J. H. Alexander of the Maryland Geol. Surv. (1833), q.v.

For details of route followed, see WARREN, p. 40–2. Nicollet read two papers in 1841 and 1843 respectively before the Amer. Assoc. Geol. & Nat. (1840), (see below: PAPERS), on his explorations. The Report is replete with information concerning the natural history of the regions traversed. See also MERRILL, (1), p. 316. (See Annot. Bib.). See also MERRILL. First 100 yrs Amer. Geol. 1924. p. 153–54.

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1891 WINCHELL, N. H. Joseph Nicolas Nicollet. (In Amer. Geol. v. 8, p. 343–52, port. 1891).

Further facts by H. V. Winchell, in v. 13, p. 126–28. 1894.

Report

(1) Senate edition, Serial no. 380

1843 NICOLLET, J[oseph] N[icolas]. Report intended to illustrate a map of the hydrographical basin of the Upper Mississippi River, made by . . . while in the employ of the Corps of Topographical Engineers . . . Feb. 16, 1841. Washington, Blair & Rives, 1843. 170 p. map. (In U. S. 26th Cong., 2d sess., Sen. Doc. v. 5, pt. 2, no. 237.) Serial no. 380.

Preface dated Sept. 13, 1843.

(2) House edition, Serial no. 464

1845 ———. Same . . . Washington, 1845. 170 p. map. (In U. S. 28th Cong., 2d sess., H. Doc. v. 2, no. 52.) Serial no. 464.

Contents (Same for both ed.)

Part 1.

p. 7	Report . . .
p. 7– 74	Physical geography of the region embraced within the map.
p. 75– 92	Sketch of early history of St. Louis.

Part 2.

p. 93–121	Barometrical & astronomical observations.
p. 122– 42	Table of geographical positions. Appx. A.
p. 143– 65	Torrey, John. Catalogue of plants colllected by Charles Geyer, under the direction of J. N. Nicollet, during his exploration of the region between the Mississippi and Missouri Rivers. Appx. B.
p. 167– 70	Nicollet, J. N. List of fossils belonging to the several formations alluded to, in the Report; arranged according to localities. Appx. C.

Papers in Society Transactions

1841 NICOLLET, J. N. Some . . . remarks upon the geology of the region of the Upper Mississippi, and the Cretaceous formation of the Upper Mississippi.
Rd before Assoc. Amer. Geol. & Nat. (1840), Apr. 9, 1841. In its Rept. 1843. p. 32–4. Also in Amer. J. Sc. v. 41, p. 180–82. July, 1841

1843 ———. On the Cretaceous formation of the Missouri River.
Rd before Assoc. Amer. Geol. & Nat. (1840), Apr. 28, 1843. Abstr. in Amer. J. Sc. v. 45, p. 153–55. July, 1843. Remarks by H. D. Rogers, p. 155–56.

———. . . . Exhibited his original map of the Northwestern territory of the United States, made from personal observations, and read an account of his geographical exploration of the sources of the Mississippi.
Rd before Amer. Phil. Soc. (1769), May 29, 1843. In its Proc. v. 3, p. 140–42. May, 1843.

PENNSYLVANIA GEOLOGICAL SURVEY (1836)

History

''Proposals have been issued for making a geological and mineralogical survey of Pennsylvania, for publishing a series of geological maps . . . The people voted on it Sept. 30, 1826. Report . . . made by the Committee, Dec. 6, 1826.'' From AMER. J. SC. v. 12, p. 173–76. Mar. 1827. The proposals were unsuccessful at the election and the survey was postponed.

''Through the instrumentality of the GEOLOGICAL SOCIETY OF PENNSYLVANIA (1832), q.v., an act providing for a Geological Survey of the State was reported to the legislature in 1832 but failed to pass. It was resubmitted annually for several years, and each year received the same treatment until under the urgent demands of the people, the legislature passed it May 29, 1836. The act authorized an annual appropriation of $6,400 for five years. Prof. Henry D. Rogers, formerly state geologist of New Jersey was appointed state geologist. During the first year the general geologic features of the state were determined, and the Palaeozoic section divided into twelve formations, numbered from I to XII. This numerical nomenclature was used in the Pennsylvania publications for many years. Number I was the limestone at Harrisburg and number XII the coal measures. In this first year also an under-standing was obtained of the anticlinal and synclinal folds which are so conspicuous a feature of the geology of the state.

"In the second year of the Survey detailed work was begun in the anthracite region and in the third year, nine assistants were scattered over the state, each man assigned to a district. This third season's work resulted in the discovery that the coal measures of Pennsylvania are divided into two series, and that the bituminous coal-field is characterized by folds and basins, but with a simpler central structure than those in the central part of the state. The Survey continued its work until 1841, but as the people could not see that they were getting what they wanted out of it, the legislature failed to make an appropriation in 1842. For three years, however, Mr Rogers continued to prepare reports without remuneration from the state. In 1848, he submitted a Final Report but it was not until 1851 that public printing of the Report was authorized.

"The work being then ten years old, the legislature made an appropriation to cover the cost of the field-work necessary to bring the Report up-to-date and to defray the expense of its publication. From 1851 to 1854 field work was carried on each season but it was not until 1858 that the Final Report of the Survey appeared . . ." Extracts from HAYES, p. 122–23. (See Annot. Bib.).

During the course of the Survey, Rogers employed the following as assistants for various periods:

1836–37	James C. Booth, John F. Frazer, R. E. Rogers.
1838	S. S. Haldeman, Charles Trego, James D. Whelpley. Alexander McKinley, Alfred F. Darley, Edwin Haldeman, Horace Moses, Peter W. Sheafer.
1839	Harvey B. Holl, James T. Hodge, Robert M. S. Jackson, John C. McKinney, Townsend Ward, Martin H. Boyé.
1840	J. P. Lesley, Jr., Andrew A. Henderson, Mr Stone.
1851	Edward Desor, Augustus A. Dalson, Henry W. Poole, Leo Lesquereux, J. P. Lesley, P. W. & John Sheafer.

The expenses annually during the course of the Survey were as follows: 1836, $2,700; 1837, $6,500; 1838, $12,000; 1839, $16,000; 1840, $17,800; a total of $55,000.

From 1836 through 1842, Rogers submitted six annual Reports containing the preliminary observations of the Survey.

For a list of the documents relating to the Survey to be found in the State Documents of Pennsylvania, see HASSE, (2), Pa., pt. 13, 1919–20, v. 2, (under Geology).

For a critical discussion of the Reports of Rogers, with especial emphasis on the Final Report of 1858, see MERRILL, (1), p. 489–95; and the excellent essay and account of the explorations, etc., in Pa., by LESLEY, (see BIBLIOGRAPHY: 1876, below). See also MERRILL. First 100 yrs Amer. Geol. 1924. p. 188–89, 373–79.

For a history of the state surveys to 1885, see Bibliography: 1920: Merrill, below.

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1833 SAY, Benjamin. Report of a committee of the House of Representatives recommending an appropriation by the legislature to make a geological survey of the state, under the direction of the Geological Society of Pennsylvania . . . read March 23, 1833. Harrisburg, Pa., Printed by Henry Welsh, 1833. 10 p.

Say, chairman of the Committee. Request from the Society made by Messrs J. B. Gibson, Richard Harlan and H. S. Tanner, officers of the Society. See also Geol. Soc. Pa. (1832).

1836 TREGO, C. B. Report of the Committee appointed on so much of the Governor's Message as relates to a geological and mineralogical survey of the state of Pennsylvania . . . February 3, 1836. Harrisburg, Pa., 1836. 12 p.

1851 PENNSYLVANIA. Report of Joint Committee on the publication of the Geological Survey . . . Mar. 7, 1851.

In Pa. Docs. Senate Jour. 1851. v. 2, p. 131–44. Also in House Jour. 1851. v. 2, p. 131–44. (Doc. no. 9).

1859 ROGERS, W. B., Jr. A few facts regarding the Geological Survey of Pennsylvania, exposing the erroneous statements and claims of J. P. Lesley, Secretary of the American Iron Association. Phila. 1859. 22 p.

1876 LESLEY, J[ohn] Peter. . . . Historical sketch of geological explorations in Pennsylvania and other states . . . with an appendix containing the annual reports of the state geologist to the Board of Commissioners. Harrisburg, 1876. 200 + 26 p. (In Second Geol. Surv. Pa. 1874–6. Repts. Progress. v. A.)

ch. 1 Early observations of the geology of Pennsylvania. p. 1–28.
2 The Geological Society of Pennsylvania and what it did to bring about the first Geol. Surv. of Pa. p. 29–52.
3 A history of the First Geological Survey of Pennsylvania. p. 53–197.

4 A sketch of the other state Geological Surveys in the United States, and their relations to that of Pennsylvania. p. 198–200.

appx. Second Geological Survey of Pennsylvania 26 p.

Resume of this sketch in PA. TOPOG. & GEOL. SURV. Rept. 1908–10. Harrisburg, 1910. p. 12–21.

1878 HUNT, T[homas] Sterry. . . . Special report on the trap dykes and Azoic rocks of southeastern Pennsylvania: part 1: Historical introduction. Harrisburg, 1878. 21 + 253 p. pl. (In Second Geol. Surv. Pa. v. E.)

Historical sketch of the Pre-Silurian Geology . . . ch. 2–4, p. 23–253.

1889 LESLEY, J[ohn] P[eter]. . . . A dictionary of the fossils of Pennsylvania and neighboring states named in the reports and catalogues of the Survey; compiled for the convenience of the citizens of the state by J. P. Lesley, state geologist; 3,000 figures mostly facsimile copies of those published by H. D. Rogers, Hall, Conrad, Vanuxem, Emmons, Logan, Dawson, Billings, Hitchcock, Newberry, Meek, Collett, Worthen, Rominger, D. D. Owen, Cox, Lyon, Safford, Fontaine, Lesquereux, Wolcott, Leidy, Cope, and others; and some new species drawn and described by G. B. Simpson. Harrisburg, 1889–90. 3 v. illus. pl. (In Second Geol. Surv. Pa. v. P 4.)

v. 1, 1889, A–M, 14 + p. 1–437 + 31 p (Errata.)
v. 2, 1889, N–R, p. 439–914 + 10 p.
v. 3, 1890, S–Z, p. 915–1283 + 13 p.

1895 INGHAM, William A[rmstrong]. . . . A general index of the final summary report of the Geology of Pennsylvania . . . with an appendix containing a list of and brief guide to the publications of the Survey (1874–1891). Harrisburg, 1895. 98 + 30 p.

1896 MILLER, Herman P. A list and brief guide to the publications of the Pennsylvania Geological Survey, 1874–1895. Harrisburg, Clarence M. Busch, 1896. 36 p.

1908 STONE, Ralph W[alter]. Geologic work in Pennsylvania . . . Harrisburg, Pa., 1908. (In Pa. Topogr. & Geol. Surv. Ann Rept. 1906–8. p. 83–98).

Hist. of the First Survey, p. 83–7.
Hist. of the Second Survey, p. 87–98.

1912 PENNSYLVANIA. TOPOGRAPHIC & GEOLOGICAL SURVEY. Publications of the Pennsylvania Surveys and of the United States Geological Survey relating to Pennsylvania. (In its Rept. 1910–12. appx. B. p. 25–45).

Repr. in Appx. A. of Rept. 1912–14. Harrisburg, 1914. p. 23–48.

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Comp. from MS notes by J. P. Lesley, written in 1886.

Preliminary Reports

1836 ROGERS, Henry Darwin. First annual report of the state geologist, read in the house of Representatives, Dec. 22, 1836. Harrisburg, 1836. 22 p.

Rev. in Amer. J. Sc. v. 32, p. 192–93. Apr. 1837. Report written Dec. 20, 1836. This and following Reports also issued in German.

1838 ———. Second annual report of the state geologist, read in Senate, February 1, 1838. Harrisburg, 1838. 91 p.

Rev. in Amer. J. Sc. v. 34, p. 189–90. Apr. 1838. Report written Jan. 27, 1838. Another ed. of Report. 93 p. In Sen. Docs. 1838. p. 360–433.

1839 ———. Third annual report of the state geoligist read in the Senate, Feb. 19, 1839. Harrisburg, 1839. 119 p.

Also in Sen. Docs. 1839, p. 541–634. Rev. in Amer. J. Sc. v. 37, p. 380–83. Oct. 1839.

1840 ———. Fourth annual report on the Geological Survey of the state of Pennsylvania read in the House of Representatives, Feb. 8, 1840. Harrisburg, 1840. 252 p.

Another ed. 215 p. Report written Feb. 1, 1840.

1841 ———. Fifth annual report on the Geological Survey of the state of Pennsylvania . . . Harrisburg, 1841. 179 p.

Another ed. 156 p. Submitted Feb. 1, 1841.

1842 ———. Sixth annual report on the geological survey of the state of Pennsylvania . . . Harrisburg, 1842. 28 p.

Final Report

1858 ———. The geology of Pennsylvania, a government survey with a general view of the geology of the United States; essays on the coal-formation and its fossils, and a description of the coal-fields of North America and Great Britain . . . Edinburgh & London, Blackwood; Phila. J. B. Lippincott & co., 1858. 3 v. in 2. 27 + 586 + 16 + 666, + 667–1046 p. 778 illus. 82 pl. sect. maps. 4.°

Preface dated April, 1858.

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v. 1, 27 + 586.

Preface. pref. p. 1–8.
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Physical geography. p. 1–58.
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  Book 1. Gneissic rocks of Pennsylvania. p. 66–103.

Part 2. Palaeozoic or ancient fossiliferous strata of Pennsylvania. p. 103–586, & v. 2, p. 1–666.
  Introductory book. p. 104–48.
  Book 1. Primal and auroral strata of the Atlantic slope. p. 149–236.
    Division 1. Primal series. p. 149–207
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  Book 2. The Kittatinny Valley, or the Second Palaeozoic district. p. 237–69.
  Book 3. District of the Orwigsburg and Stroudsburg Valley. p. 270–93.
  Book 4. Fourth, or north-eastern district. p. 294–312.
  Book 5. Fifth, or lower Juniata district, being the southeastern half of the Appalachian chain between the Susquehannah and Maryland. p. 313–433.
    Division 1. First and second synclinal and included anticlinal belts embracing Perry and the north-western portion of Franklin County. p. 313–66.
    Division 2. Third synclinal belt, or Shade and Blacklog Mts. p. 367–95.
    Division 3. Fourth synclinal belt, or Lewistown Valley and its branches, from the Susquehannah south-westward. p. 396–433.
  Book 6. Sixth or Upper Juniata district, being the northwestern half of the Appalachian chain between the Susquehannah and Maryland. p. 434–575.
    Division 1. First belt of the sixth district, Montour Ridge, Buffalo Valley, Muncy Hills, etc. p. 434–52.
    Division 2. Second belt of the fifth district or anticlinal north of Shickshinny Mountain. p. 453–60.
    Division 3. Third belt of the sixth district, or the country embraced between Jack's Mountain and Sideling Hill on the south-east, and Bald-Eagle, Dunning's and Wills Mountains on the Northwest. p. 461–511.
    Division 4. Fourth belt of the sixth district, Stone, Hare and Trough-Creek Valleys, and Broad Top Mountain. p. 512–33.
    Division 5. Of the fifth belt of the sixth district, or that between the Bald Eagle and Allegheny Mountains. p. 534–75.
  Book 7. Seventh or north-western district. p. 576–86.

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Book 8. Eighth Palaeozoic district, or anthracite coal-basins, and encircling belts of the older Carboniferous rocks. p. 1–465.

Introduction. p. 1–25.

Division 1. Detailed description of the southern or Schuylkill basin. p. 26–238.

Division 2. Eastern Middle Anthracite coal-field. p. 239–64.

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Division 1. Vespertine and Umbral series in the bituminous coal region of Pennsylvania. p. 466–73.

Division 2. Umbral red shale—geographical distribution. p. 474–666.

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Part 3. Mesozoic Red sandstone series. p. 667–97.

Part 4. Igneous rocks and minerals, veins, and ores. p. 698–740.

Sketch of the Geology of the United States. p. 741–75.

Conditions of the physical geography attending the production of the Palaeozoic strata of the United States. p. 776–815.

See Papers: 1874, below.

Organic remains of the Palaeozoic strata of Pennsylvania. p. 815–34.

Note on the Beyrichiae and Leperditiae of Pa. by *T. R. Jones. p. 834–35.

Lesquereux, Leo. General remarks on the distribution of the coal-plants in Pennsylvania and on the formation of coal. p. 837–47.

————. Description of the fossil plants found in the anthracite and bituminous coal-measures of Pennsylvania. p. 847–78.

————. Catalogue of the fossil plants which have been named or described from the coal measures of North America. p. 878–84.

On the laws of structure of the more disturbed zones of the earth's crust. p. 885–916.

Classification of the several types of orographic structure visible in the Appalachian and other undulated mountain-chains. p. 917–41.

Coal-fields of the United States and British provinces. p. 942–1024.

Glossary. p. 1025–27.

Index. p. 1028–45.

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1854 Lesquereux, Leo, and Rogers, H. D. New species of fossil plants, from the anthracite and bituminous coal-fields of Pennsylvania; collected and described by Leo Lesquereux, with introductory observations by H. D. Rogers.

Rd before Bost. Soc. Nat. Hist. (1830), July 19, 1854. In its Jour. v. 6, p. 409–31.

1875 Rogers, H. D. Extracts from the Geology of Pennsylvania, 1858 . . . on the coal-formation of Pennsylvania. Harrisburg, 1875. (In Second Geol. Surv. Pa. 1874–76. v. H, appx., p. 247–75)

See p. 796–810, above, under Rogers' Report: 1858, v. 2, pt. 2.

UNITED STATES COMMISSIONER OF PATENTS, AGRICULTURAL REPORTS (1836)

History

By an act of "July 4, 1836" the U. S. Commissioner of Patents was directed to make annual reports. Beginning with that for 1837, there was included an agricultural report, which beginning with that for 1849, was contained in a separate volume. In 1862 the present Department of Agriculture was created, with a sub-department of Entomology. Townend Glover became the first government entomologist. The Agricultural Reports include a large number of papers on natural history topics.

Reports

1836–1865, pub. 1837–1866.

Papers on Natural History

1845 **for 1844.**

Herrick, E. C. On the Hessian fly. appx. 1, p. 161–75.

1851 **for 1850.**

Lee, Daniel. The study of soils. p. 25–81.

1852 **for 1851.**

Baird, S. F. On the ruminating animals of North America, and their susceptibility of domestication. p. 104–28.

1853 **for 1852.**

Goodrich, C. E. The potato—its natural history—deterioration and improvement. p. 354–72.

1855 **for 1854.**

Browne, D. J. Insects. p. 58–9, illus.

Glover, Townend. Insects injurious and beneficial to vegetation. p. 59–89, 6 pl.

Browne, D. J. Trees and shrubs usually employed for hedges. p. 396–418.

1856 **for 1855.**

Glover, Townend. Insects. p. 64–119, 5 pl.

1857 **for 1856.**

Kennicott, Robert. The quadrupeds of Illinois, injurious and beneficial to the farmer. p. 52–110, 10 pl.

(Also in Illinois St. Agric. Soc. (1853). Trans. v. 2, p. 615–84, 10 pl.). Cont. in second entry.

Holmes, Ezekiel. Birds injurious to agriculture. p. 110–60, 32 pl.

1858 **for 1857.**

Kennicott, Robert. The quadrupeds of Illinois, injurious and beneficial to the farmer. p. 72–107, 1 pl.

Cont. from preceding volume & cont. in next.

Browne, D. J. Nature and habits of the honeybee. p. 107–21, 1 pl.

Glover, Townend. Investigations on the insects and diseases affecting the cotton plant. p. 121–29, illus. 1 pl.

Torrey, John. Notice of several indigenous plants suitable for hedges. p. 239–43.

1859 **for 1858**

Kennicott, Robert. The quadrupeds of Illinois, injurious and beneficial to the farmer. p. 241–56.

Cont. from preceding volume.

Glover, Townsend. Insects frequenting the orange trees of Florida. p. 256–71.

————. Insects injurious to the cotton plant in Florida. p. 271–72.

1860 **for 1859.**

————. The hang-worm. p. 551–54, illus.

1861 **for 1860.**

Uhler, P. R. Insects injurious to vegetation. p. 312–22.

Cooper, J. G. The forests and trees of North America, as connected with climate and agriculture. p. 416–45.

1862 **for 1861.**

Prince, W. R. The strawberry (Fragraria); its species, native localities, and their normal sexual character. p. 189–206.

Morris, J. G. The Ailanthus silk-worm of China (bombyx cynthia). p. 374–82.

Buckley, S. B. The grapes of North America. p. 478–86.

Rathvon, S. S. Entomology and its relations to the vegetable productions of the soil, with reference to both destructive and beneficial insects. p. 585–620, illus.

1863 **for 1862.**

Gardner, Thomas. Wild flowers. p. 155–62.

Goodale, G. L. Remarks on the physiology of breeding. p. 222–42.

Rathvon, S. S. Entomology and its relations to the vegetable productions of the soil with reference to both the destructive and beneficial insects. p. 372–90, 4 pl.

Morris, J. G. Additional observations on the Ailanthus silk-worm of China. p. 390–94.

1864 **for 1863.**

Samuels, E. A. Mammology and ornithology with reference to agricultural economy. p. 265–86.

Michener, Ezra. Agricultural ornithology. p. 287–307.

Lippincott, J. S. Geography of plants. . . p. 464–525.

Colvin, Richard. The Italian honey-bee; or The culture and Italianization of the native or black honey-bee. p. 530–46.

Glover, Townend. Report of the entomologist. p. 561–79.

1865 **for 1864.**

Elliott, D. G. The "game birds of the United States." p. 356–85, 5 pl.

Samuels, E. A. Oology of some of the land birds of New England as a means of identifying injurious or beneficial species. p. 386–430.

West, R. A. Fresh and salt-water aquaria. p. 446–70, pl.
Glover, Townend. Report of the entomologist. p. 540–64.

1866 **for 1865.**

————. Report of the entomologist. p. 33–45.

————. Entomological exhibition in Paris. p. 88–102.

Pech, F. Botanical history of Sorghum. p. 299–307, illus.

WESTERN ACADEMY OF NATURAL SCIENCES, ST. LOUIS (1836)

History

"The first stone placed in the foundation for an edifice of science in the Mississippi Valley and probably the first west of the Alleghanies was an informal meeting, held in St. Louis, late in 1836 . . . The conference resulted in the formation and organization of the Western Academy of Natural Sciences at St. Louis.

"The new Society received its charter Feb. 6, 1837. The incorporators were H. King, George Engelmann, B. B. Brown, P. A. Pulte, William Weber, Theodore Engelmann, and Adolph Wislizenus, who subsequently became founder and active worker in the more fortunate Academy of Science of St. Louis (1856), q.v. The population of St. Louis, at this period, was 14,253 . . . little more than a frontier town . . . It had a library, museum and a five acre botantic garden . . . It did not endure, however, for very long . . .'' Extract from WHELPLEY, H. M., p. 21–2. 1906 (see Bibliography, below).

Part of the collections and the library were turned over in 1856 to the ACADEMY OF SCIENCE OF ST. LOUIS (1856), q.v., founded by several of the former members of the Western Academy.

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Western Academy treated on pref. p. 21–2.

1914 KLEM, Mary J. The history of science in St. Louis. St. Louis, Dec. 29, 1914. (In Acad. Sc. St. Louis. Trans. v. 23, no. 2, p. 79–127).

DELAWARE GEOLOGICAL SURVEY (1837)

History

The first and only Geological Survey of the State of Delaware was authorized by the State Legislature by an Act passed Feb. 18, 1837, appointing James Curtis Booth, a chemist by profession, state geological surveyor, for a period of two years. Three thousand dollars were appropriated, of which two thousand were paid to Booth for his services.

His First and Second Annual Reports, preliminary reports, were published in 1839, and his final ''Memoir'' appeared in 1841 (see REPORTS, below). He was assisted in a chemical capacity by M. H. Boyé.

For a critical review of the geological contents of the Report of 1841, see MERRILL, (1), p. 348–49. (See Annot. Bib.). The documents in the Delaware State documents files concerning the Geological Survey, are given in the Bibliography, below, as they appear in HASSE, (2), p. 108 (Delaware).

See also Merrill (Bibliography: 1920), for a history of the Survey. See also Merrill. First 100 yrs Amer. Geol. 1924. p. 193–94.

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1836 DELAWARE. Governor. Propriety of ordering a geological survey of the state, with a view to the exploration of its mineral productions. (In Governor's Message. June, 1836).

1837 ———. Report on so much of Governor's Message as relates to agricultural interests of the state; recommending development of natural resources; and authorization of Geological Survey. (In Sen. Jour. Jan. 1837. p. 104–6).

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1839 ———. Commiss. Geol. & Min. Surv. Communication from Commissioners appointed under act of February 18, 1837, to procure a geological and mineralogical survey of the state, relative to contract made with J. C. Booth for same. (In House. Jour. Jan. 1839. p. 62–3).

1841 ———. Sec. State. Communication from Secretary of State transmitting letter of Chairman of Commissioners appointed under act of Feb. 18, 1837, to procure geological and mineralogical survey of the state. (In Sen. Jour. 1841. p. 37–8).

BOYÉ, M. H. . . . The results of the analysis of three different varieties of felspar from the primary rocks of the state of Delaware, as performed by Prof. Booth and himself.

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1841 ———. Memoir of the geological survey of the state of Delaware: including the application of the geological observations to agriculture. Dover, Del., Printed by S. Kimmey, 1841. 11 + [9]–188 p. illus.

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Preface omitted.
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Preface. pref. p. [3]–11.
Pt. 1 General view of the geology of the state. p. 9–22.
  ch. 1 Primary formations. p. 9–14.
    2 Upper Secondary formations. p. 14–8.
    3 Tertiary formations. p. 18–20.
    4 Recent formations. p. 20–2.
Pt. 2 Special geology. p. 23–108.
  ch. 1 Primary rocks. p. 23–38.
    2 Upper Secondary deposits. p. 38–80.
    3 Tertiary formations. p. 81–94.
    4 Recent formations. p. 94–108.
Pt. 3 Economical geology. p. 109–83.
  ch. 1 Agriculture. p. 109–67.
    2 Arts of construction. p. 167–76.
    3 Chemical arts. p. 176–83.
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HARVARD NATURAL HISTORY SOCIETY, CAMBRIDGE, MASS. (1837)

History

"The Harvard Natural History Society was founded on the fourth of May, 1837, by a few members of the Senior and Junior classes, who were interested in the pursuit of natural history. Their objects were: 'to improve themselves in this study, and to collect a cabinet of specimens, and to form a library.'

"These objects have ever since been kept in view, and the collection now occupies a large room on the lower floor of Massachusetts Hall. Of the different departments of the Cabinet, that of conchology is particularly valuable, having been greatly encircled by a large and splendid collection of foreign shells, presented in 1838, by J. P. Couthouy . . . To the liberality of Mr Edward Doubleday of Epping, England, the Society is indebted for a fine collection of English plants. The library has gone on increasing and now contains about 125 volumes . . ."

The Society was founded by John Bacon, its first president; W. L. Bowditch, P. T. Jackson, T. W. Stone, J. W. Thaxter.

The Library of Harvard University contains the MS records of the activities of the Society. They include: 1) List of the exchanges of the mineralogical department . . . 1840; 2) A record of the members and their supposed specialties; 3) Catalogues of the Library, 1837–56; 4) Constitution and by-laws; 5) List of records of the Harvard Natural History Society in Gore Hall, Jan. 17, 1903.

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4th ed., 1863. 38 p.; 5th ed., 1866. 36 p.

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1842 RUSSELL, J. L. On the study of natural history. Rd May 5.
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1848 HALL, James. An address delivered at a meeting of the H. N. H. S., May 24, 1848. Cambridge, Mass., 1848. 39 p.
On the chief features of geological investigation.

1851 WHITTEMORE, H. H. F. Alphabetical catalogue of the minerals of the H. N. H. S. Cabinet. Cambridge, Mass., 1851–52. (In MS)

1853 HILL, Thomas. The annual address, Thursday, May 19, 1855. 26 p.
"The position of natural history among the natural sciences, and its aims."

INDIANA GEOLOGICAL SURVEYS (1837)

History

By an act passed on Feb. 6, 1837, the first Geological Survey of the state of Indiana was authorized. David Dale Owen was appointed state geologist. He served for the period of two years, the length of the survey, and rendered two reports.

Nothing was done in the state from 1839 to 1852, when the state legislature appropriated a small sum for a further geological survey under the supervision of Ryland T. Brown. Brown made one Report in 1854, and the survey went out of existence.

On March 15, 1859, the legislature appropriated $5,000 for a new survey of the state and again appointed D. D. Owen. Owing to his decease in 1860, the work was carried under the direction of his brother Richard who was appointed state geologist. His Report was published in 1862. The Civil War brought the survey to an end.

Owen's assistants were Robert Peter, Leo Lesquereux, and Joseph Lesley, Jr.

For estimates of the geological and other work accomplished by these surveys, see MERRILL, (1), p. 349–50, 433–34, 507;

BLATCHLEY, (see Bibliography, 1917, below) and MERRILL, (see Bibliography, 1920, below). See also MERRILL. First 100 yrs Amer. Geol. 1924. p. 194–95, 302–3, 396.

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1897 KINDLE, Edward M[artin]. Bibliography of Indiana palaeontology. Indianapolis, 1897. (In Indiana. Dept. Geol. & Nat. Resources. 22d Ann. Rept. p. 489–514).

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————. General index to all the publications of the Indiana Geological Survey, the Department of Geology and Natural Resources and the Department of Geology and Natural History. Indianapolis, 1904. (In Indiana. Dept. Geol. & Natural Resources. 28th Ann. Rept. 1903. p. 497–553)

1917 BLATCHLEY, W[illis] S[tanley]. A century of geology in Indiana. Indianapolis, 1917. (In Indiana Acad. Sc. Proc. for 1916. p. 89–177)

Very thorough study and discussion of the achievements of the various surveys of the state. Those up to 1865, are treated on p. 89–123.

COULTER, John M[erle]. A century of botany in Indiana. Indianapolis, 1917. (In Indiana Acad. Sc. Proc. 1916. p. 236–60).

Bibliography, p. 241–60, arranged in author alphabet.

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Review of the surveys of the state up to 1885.

1922 CUMINGS, E. R. Bibliography of Indiana stratigraphy and paleontology, including papers bearing on certain general problems of correlation. Indianapolis, 1922. (In Indiana. Dept. Conserv. Hand Book of Indiana geology. p. 534–70)

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Separate pub. in 1855. See BLATCHLEY, p. 111–14. (Bibliography, 1917—above)

1862 OWEN, Richard, and others. Report of a geological reconnaissance of Indiana, made during the years 1859 and 1860, under the direction of the late David Dale Owen, M.D., state geologist, by Richard Owen, M.D., principal assistant, now state geologist; also, reports on the analysis of the soils, by R. Peter, chemist; survey of the coal fields by Leo Lesquereux, fossil botanist; and topographical work, by Joseph Lesley, topographical geologist . . . Indianapolis, H. H. Dodd & co., 1862. 16 + 368 p. illus. pl. maps. sect. diagr. 4.°

D. D. Owen's Official Rept. for 1859–60, appeared in condensed form in Indiana State Docs. House Jour. 1861. pt. 2, Doc. no. 5.

Contents:

Preface. 16 p.

p. 1–240	Owen, Richard. Report.
p. 241–68	Peter, Robert. A report of the chemical analyses of thirty-three soils of Indiana made for the state geological and agricultural survey. (Written Apr. 30, 1860)
p. 269–341	Lesquereux, Leo. Report on the distribution of the geological strata in the coal measures of Indiana. (Made Feb. 5, 1861)
p. 343–45	Lesley, Joseph, Jr. Report. Made Dec. 1860.
p. 347–60	Tables, appx. etc.
p. 362–65	Owen, Richard. Description of fossils. 2 pl. [11 fig.] Written Mar. 3, 1862.

MICHIGAN GEOLOGICAL SURVEYS (1837)

History

By virtue of an act approved Feb. 23, 1837, the Michigan state legislature authorized the organization of a geological survey of the state. Douglass Houghton was appointed the state geologist, with the following assistants: Abram Sager, zoological and botanical assistant, Sylvester W. Higgins, Columbus C. Douglass, Bela Hubbard, and William P. Smith, geological assistants.

Under a subsequent act, approved March 23, 1838, the Survey was reorganized, and John Wright added to the scientific corps, as botanist. Annual reports were submitted by Houghton and his associates through the year 1845, when the survey came to an untimely end because of Houghton's accidental death by drowning. In all, the state appropriated $52,000 for the conduct of the survey between 1837 and 1845.

In 1844 Houghton entered into an agreement with the U. S. Land Office to assist in the surveys later known as JACKSON'S U. S. SURV. OF THE MINERAL LANDS OF MICHIGAN (1847), q.v., the reports of which contain partial reports by Messrs. W. A. Burt and Bela Hubbard, associated with Houghton in this co-operative task.

By an act approved Feb. 15, 1859, authorization was given to complete the geological survey of the state, left unfinished by Houghton and his staff. Alexander Winchell was appointed state geologist, and was assisted by Manly Miles, N. H. Winchell, Albert D. White, E. Doge, with Abram Sager, J. L. Le Conte, J. H. Goodsell, E. E. Baldwin and E. P. Austin collaborators or volunteer collectors.

On Dec. 31, 1860, Winchell presented his first biennial report, which was published in 1861, in an edition of 5,000 copies. Work was carried under reduced appropriations in 1861 and 1862, and practically suspended in 1863. In all, the appropriations durng the Winchell regime, 1859–62, totalled about $6,000.

A very extended account of the Houghton, Winchell and subsequent surveys of the state of Michigan prior to 1885, will be found in Merrill, 1920, p. 158–239 (see Bibliography: 1920: Merrill, below), written by Winchell, edited by Merrill.

Below, are given the annual reports of the Houghton survey and their contents, with references to Winchell and Merrill's account noted above. See also MERRILL. First 100 yrs Amer. Geol. 1924. p. 206–8, 393–96.

The bulk of the natural history collections made during the lives of the Houghton and Winchell Surveys were deposited with the University of Michigan Natural History Museum (1837), q.v.

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1839 ————. Communication . . . relative to the Geological Survey . . . March 7, 1839.

In Sen. Doc. no. 25, p. 463–66.

1846 MICHIGAN. Report of the Joint Committee relative to the Geological Survey. 1846. 8 p.

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1861 WINCHELL, Alexander. Sketch of the history of geology in Michigan. Lansing, Mich., 1861. (In his First biennial rept. 1861. p. 5–17).

1881 HUBBARD, Bela. A Michigan geological expedition in 1837. (In Pioneer Soc. State Michigan. Pioneer Collections. v. 3, p. 189–201. 1881).

1889 BRADISH, Alvah. Memoir of Douglass Houghton, first state geologist of Michigan; with an appendix containing reports and abstracts of the first geological survey, and a chronological statement of the progress of geological exploration in Michigan. Detroit, Raynor & Taylor, 1889. 302 p.

1904 LANE, Alfred C[hurch]. Historical review of the geology of Michigan. Lansing, Mich., 1904. (In Michigan Acad. Sc. 5th Ann. Rept. p. 184–95).

1915 LEVERETT, Frank, and TAYLOR, Frank B. The Pleistocene of Indiana and Michigan and the history of the Great Lakes. Washington, 1915. 529 p. pl. map. (In U. S. Geol. Surv. Monographs. v. 53).

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1917 MICHIGAN GEOLOGICAL AND BIOLOGICAL SURVEY. Catalog and table of contents of the publications of the Michigan Geological and Biological Survey, with a list of the publications of the United States Geological Survey relating to Michigan: 1838–1917. Lansing, 1917. 30 p.

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Edited from MS by Alexander WINCHELL.

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1838 HOUGHTON, Douglass. First annual report of the state geologist. Detroit, 1838. 39 p.

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For discussion of contents, see above (Bibliography: 1920: Merrill, p. 160–62)

1839 ————. Report of the state geologist, in relation to the improvement of the state salt springs . . .

In House Doc. no. 2, p. 39–45; & in Sen. Doc. no. 1, p. 1–7.

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1840 ————. Report of the state geologist relative to the improvement of the salt springs . . . in 1840.

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Also in House Doc. no. 27, v. 2, p. 206–93; & Sen. Doc. no. 7, v. 2, p. 66–153.

Report rendered Feb. 3, 1840. State geologist's accounts, in Sen. Doc. no. 15–18, p. 209–24.

Report of Select Committee on Houghton's Report, in House Doc., no. 46, p. 455–61 (v. 2).

For discussion of contents, see (Bibliography: 1920: Merrill, p. 168–75, above.)

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DOUGLASS, C. C. Geological report. 23 p. Jan. 12, 1840.
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1841 ———. Special message concerning the state salt springs . . .
In Joint Docs. no. 5, p. 235–54.

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In House Doc., no. 35, p. 94–8.

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For discussion of contents, see above (Bibliography: 1920: Merrill, p. 175–90, q.v.)

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p. 537–40 HUBBARD, Frederick. Latitudes and magnetic variations. . .
p. 541–52 DOUGLASS, C. C. Report. Jan. 4, 1841.
p. 552–78 HUBBARD, Bela. Report. Jan. 24, 1841.
p. 578–98 HIGGINS, S. W. Report. Jan. 24, 1841.

1842 ———. Report of the state geologist relative to the state salt springs.
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———. Fifth annual report of the state geologist . . . Jan. 25, 1842. Detroit, 1842.

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Report by Special Committee, House Doc. no. 19, p. 77–9.

See also above (Bibliography: 1920: Merrill, p. 190–91)

1843 ———. Report relative to the state salt springs.
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———. Sixth annual report of the state geologist . . .
In Joint Docs. no. 8, p. 398–402. Rendered Jan. 31, 1843.
See also (Bibliography: 1920: Merrill, p. 191–92, above)

1844 ———. Seventh annual report of the state geologist . . . Feb. 15, 1844.
In Joint Docs. no. 11, 3 p.
See also above, (Bibliography: 1920: Merrill, p. 192–93)

1846 HIGGINS, Sylvester W. Report from the geological department . . . Jan. 7, 1846.
In Joint Docs. no. 12, 22 p.

1861 WINCHELL, Alexander. First biennial report of the progress of the Geological Survey of Michigan, embracing observations on the geology, zoology and botany of the Lower Peninsula made to the governor December 31, 1860. Lansing, Mich., Hosmer & Kerr, 1861. 339 p. map.
See also Merrill, p. 203–17 (under Bibliography: 1920, Merrill, above)

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p. 5–17 WINCHELL, Alexander. Sketch of the history of geology in Michigan.
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p. 211–41 MILES, M[anly]. Zoology. pt. 2.
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p. 243–330 WINCHELL, N. H. Botany. . . pt. 3.
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p. 331–39 Index.

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1862 WINCHELL, Alexander. Descriptions of fossils from the Marshall and Huron groups of Michigan.
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OHIO GEOLOGICAL SURVEY (1837)

History

"On December 8, 1835, Gov. Robert Lucas in his annual message to the General Assembly of Ohio recommended the establishment of a geological survey. This was the first official indorsement of such an enterprise. The Assembly responded with a joint resolution appointing a committee of four, headed by Dr S. P. Hildreth, one of the best informed men in Ohio on the geology and mineral resources of the state, who were to report to the next Assembly the best method of securing the desired end.

''The committee submitted a carefully prepared report, and on March (27), 1837, an act was passed providing for a complete and detailed geological survey of the state. The work planned was comprehensive, including matters not only strictly geologic, but analyses of soils, ores, marls and waters. The preparation of a geologic map of the state was specifically mentioned as was a collection of the rocks, ores and fossils. It was proposad to send these sets to the principal educational institutions of the state, thus bringing the survey closely into touch with the scholars of Ohio. The Committee thought the work of such a Survey might be completed in four years, with an annual appropriation of $12,000 . . .

''The governor appointed W. W. Mather, principal geologist, and S. P. Hildreth, John Locke, J. P. Kirtland, Caleb Briggs, Jr., J. W. Foster, and later Charles Whittlesey, assistants. Field work was begun in 1837, and the first annual report appeared in 1838 . . . the second report in 1839 . . . The causes of the abrupt termination of the Survey are not well known, but perhaps the financial crisis was the leading factor . . .'' HAYES, 1911. p. 109–10. (U. S. Geol. Surv. Bull. 465). (See Annot. Bib.).

For a critical review and estimate of the achievements of the Survey, see MERRILL, (1), p. 331–33. (See Annot. Bib.) For an historical account of the State Surveys to 1885, see below MERRILL, (Bibliography: 1920). For a list of the documents pertaining to the survey which appear in the set of State Documents, see HASSE, (2), 1911, v. 2, p. 641–50 (Index. to Economic Material). See also MERRILL. First 100 yrs Amer. Geol. 1924. p. 171–74.

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p. 77–8. Analysis of the limestone of Cincinnati and DAYTON, by John LOCKE.

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1854 COMMITTEE. Report of a select . . . on Scott Bill providing for a geological survey of Ohio. (In House Jour. appx. p. 331–40. 1854)

1857 ———. Report . . . relating to a geological survey of the state. (In House Jour. appx. p. 85–91. 1857)

ANON. Natural history of Ohio—geology—meteorology—ornithology. (In Bd Agric. 12th Ann. Rept. 1857. p. 526–32)
See also OHIO AGRIC. REPTS (1846), v. 12.

1860 COMMITTEE. Report of a select . . . on part of Governor's Message, which recommends renewal and completion of the geological survey of the state. (In Senate Jour. appx. p. 41–50. 1860)

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See also OHIO AGRIC. REPTS. (1846), v. 20.

1870 NEWBERRY, John Strong. Historical sketch of surveys in Ohio. Columbus, 1870. (In Ohio Geol. Surv. Rept. Progress for 1869. pt. 1, p. 3–10)

1873 ———. Historical sketch of state surveys in Ohio. Columbus, 1873. (In Geol. Ohio. v. 1, p. 1–15)

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p. 25– 63, no. 2 HILDRETH, S. P. Report.
p. 66– 9, no. 3 KIRTLAND, J. P. Zoological report.
p. 71– 98, no. 4 BRIGGS, Caleb, Jr. Report.
p. 99–109, no. 5 WHITTLESEY, Charles. Report.
p. 111– 21, MATHER, W. W. Geological queries.
p. 123– 29, Glossary.

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Rd before Bost. Soc. Nat. Hist. (1830), in 1845. Pub. in its Jour. v. 5, p. 21–32, 265–76, 330–44, 11 pl. Jan. & Oct. 1845 & June, 1846.

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Rd before Bost. Soc. Nat. Hist. (1830), Feb. 18, 1846. In its Proc. v. 2, p. 103–5.

UNIVERSITY OF MICHIGAN NATURAL HISTORY MUSEUM, ANN ARBOR, MICH. (1837)

History

Under the act organizing the University of Michigan, dated June 21, 1837, provision was made for a cabinet of natural history. The collection of the museum received an important addition in 1838 when the Baron Lederer collection of minerals was purchased for the University.

At the inception of the Michigan Geological Survey (1837), q.v., the Museum of the University was made the chief repository of the collections to be gathered by the state geologist and his assistants. Douglass Houghton, the first state geologist, was also professor of chemistry and mineralogy at the University. Abram Sager, the botanist of the Survey, was the professor of botany and zoology.

When the first survey under Houghton terminated in 1845, large collections had been made and presented to the University. Sager remained a professor until 1855 and made large additions. He was nominally in charge of the Museum.

In 1855, Sager was succeeded by Alexander Winchell, who in 1859–61 conducted a second state geological survey (see Michigan Geol. Surv. (1837)), and the University Museum was again the chief repository. In 1861, a large collection of natural history material made by W. P. Trowbridge for the Smithsonian Institution (1846), q.v., was presented to the University Museum. In 1859–60, collections made by Robert Kennicott in Arctic America were presented to the Museum. Winchell remained in charge until 1873. For the history of the Museum up to the present time, see the article by A. G. Ruthven noted in the Bibliography: 1910, below.

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1861 MICHIGAN, UNIVERSITY OF. MUSEUM OF NATURAL HISTORY. Catalogue of the Trowbridge collection of natural history in the . . . Ann Arbor, 1861. 4 + 32 p.
Made by Lt. W. P. Trowbridge.

1863 WINCHELL, Alexander. Report, historical and statistical on the collections in geology, zoology and botany in the Museum of the University, made to the Board of Regents, October 2, 1863, by . . . Ann Arbor, 1864. 26 p.

1910 RUTHVEN, Alexander G. The history of the Museum . . . Ann Arbor, 1910. (In his Report of the Curator of the University

Museum to the Board of Regents for the year ending June 30, 1910. p. 7–13, port. pl.)

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1919 KRAUS, Edward N. The new mineralogical laboratory at the University of Michigan. (In Amer. Mineralogist. v. 4, no. 5, p. 45–56. May, 1919).

ZOOLOGICAL AND BOTANICAL SURVEY OF MASSACHUSETTS (1837)

History

"At the general session of 1837 of the General Court of Massachusetts, the subject of a revision of the MASSACHUSETTS GEOLOGICAL SURVEY (1830), q.v., was submitted. In conformity with the recommendation of this committee, under a resolution of the 12th of April, 1837, authority was given for the appointment of some 'suitable person or persons to make a further and thorough geological, mineralogical, botanical and zoological survey, particularly in reference to the discovery of coal, marl, and ores, and an analysis of the various soils of the state relative to an agricultural benefit.'" HASSE. Index. Econ. Material Mass. 1908. p. 209.

Edward Hitchcock, who was in charge of the Geological and Mineralogical Survey of the State (1830), q.v., supervised the Zoological and Botanical Survey. He selected D. H. Storer to report on the fishes; W. B. O. Peabody, to report on the birds; Ebenezer Emmons on the quadrupeds; Chester Dewey, on the botany; T. W. Harris on the insects; A. A. Gould on the invertebrates; and G. B. Emerson on the trees and shrubs of Massachusetts.

Preliminary reports were rendered in 1838 (see below), and final reports between 1839 and 1846. Preliminary papers concerning the researches of the Survey appeared in the transactions of the American Academy of Arts & Sciences (1780), and the Boston Society of Natural History (1830). (See below PAPERS IN SOCIETY TRANSACTIONS.) For the geological and mineralogical section of the survey, see MASS. GEOL. SURV. (1830).

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Submitted Apr. 6, 1838.

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p. 31– 3 PEABODY, W. B. O. Report.
p. 35– 50 STORER, D. H. Report.
p. 53– 5 EMERSON, G. B. Report . . . Apr. 19, 1838.
p. 57–104 HARRIS, T. W. Report . . . Apr. 1838.
p. 105– 7 GOULD, A. A. Report . . . Apr. 10, 1838.

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Rev. by Amos Binney in Amer. J. Sc. v. 38, p. 393–96. Mar. 1840.

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p. 1–253 STORER, D. H. Reports on the ichthyology and herpetology of Massachusetts.
p. 255–404 PEABODY, W. B. O. Reports on the ornithology of Massachusetts.

1840 DEWEY, Chester, and [EMMONS, Ebenezer]. Reports on the herbaceous plants and on the quadrupeds of Massachusetts, published agreeably to an order of the Legislature by the Commissioners on the Zoological and Botanical Survey of the State. Cambridge, Mass., 1840. 8 + 277 + 86 p.

Rev. in Amer. J. Sc. v. 41, p. 381. Oct. 1841.

CONTENTS:

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[EMMONS, Ebenezer]. Report on the quadrupeds of Massachusetts. 5, + 4–86 p.

1841 [HARRIS, Thaddeus William]. Report on the insects of Massachusetts injurious to vegetation, published agreeably to an order of the legislature by the Commissioners on the Zoological and Botanical Survey of the State. Cambridge, Mass., Folsom, Wells, Thurston, 1841. 8 + 459 p.

Rev. in Amer. J. Sc. v. 43, p. 386–88. Oct. 1842.
Rev. in Mag. Horticulture & Bot. v. 9, p. 216–31. June, 1843.
Rev. in North Amer. Rev. v. 54, p. 73–101. Jan. 1842.
Repr. Cambridge, 1842. 2d ed. Bost. 1852.
8 + 513 p.; ed. 3, Bost. 1862. 11 + 640 p. pl.
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1841 Gould, A. A. Results of an examination of the shells of Massachusetts and their geographical distribution.
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Rd before Bost. Soc. Nat. Hist. (1830), Dec. 15, 1841. In its Jour. v. 4, p. 175–90. Sept. 1842.

1843 ————. On such parts of Dr De Kay's "Report on the fishes of New York" as related to fishes found in Massachusetts.
Rd before Bost. Soc. Nat. Hist. (1830), June 21, 1843. In its Proc. v. 1, p. 120–23. 1843.

1853 ————. A history of the fishes of Massachusetts.
Rd before Amer. Acad. A. & Sc. (1780), at intervals from 1853 to 1867. In its Memoirs as follows:
pt. 1–3, M. n. s. v. 5, p. 49–92, 122–68, 257–96, 16 + 7 pl. 1853 & 1855.
4 , M. n. s. v. 6, p. 309–72, 6 pl. 1858 (pt. 2.)
5 , M. n. s. v. 8, pt. 2, p. 389–434, 6 pl. 1863.
6 , M. n. s. v. 9, pt. 1, p. 217–63, 4 pl. 1867.

BROOKLYN, N. Y., LYCEUM OF NATURAL HISTORY (1838)

History

The Brooklyn Lyceum of Natural History was organized in Brooklyn, N. Y., February 22, 1838, by Messrs D. B. Douglass, Joseph Howard, Jr., W. R. Dwight and Jonathan Trotter. It appears to have had a rather short-lived existence and little has been discovered concerning the history of the Society, according to Stiles, in his History of Brooklyn, 1884, v. 2, p. 1302.

WILKES UNITED STATES EXPLORING EXPEDITION (1838)

History

"The Congress of the United States having in view the important interests of our commerce embarked in the whale fisheries, and other adventures in the great Southern Ocean, by an act of the 18th of May, 1836, authorized an expedition to be fitted out for the purpose of exploring and surveying that sea, as well to determine the existence of all doubtful islands and shoals, as to discover and accurately fix the position of those which lie in or near the track of our vessels in that quarter, and may have escaped the observation of scientific navigators. Liberal appropriations have been made for the attainment of these objects, and the President (Van Buren), reposing great confidence in your courage, capacity, and zeal, has appointed you to the command of the Expedition, requiring you to proceed to the performance of the duties of that station, with the vessels placed under your orders, consisting of the sloops of war, Vincennes and Peacock, the ship Relief, the brig Porpoise, and the tenders Sea-Gull and Flying-Fish.

''As soon as these vessels are in every respect ready, you will accordingly take your departure from Norfolk, and shape your course to Rio Janeiro, crossing the line between longitude 18 and 22 degrees West, and keeping within those meridians to about latitude 10 degrees South, with a view to determine the existence of certain vigias or shoals . . .

'' . . . Having completed this survey you will proceed to a safe port in Terra del Fuego, where the members of the scientific corps may have favorable opportunities of prosecuting their researches. Leaving the larger vessels securely moored, and the officers and crews occupied with their respective duties, you will proceed with the Brig Porpoise and the tenders, to explore the southern Antarctic, to the southward of Powell's group, and between it and Sandwich Land, following the track of Weddell as closely as practicable, and endeavoring to reach a high southern altitude . . .

''You will then, on rejoining the vessels at Terra del Fuego, with all your squadron, stretch towards the southward and westward as far as the Ne Plus Ultra of Cook, or longitude of 105 degrees West, and return northward to Valparaiso . . . Proceeding once more from that port, you will direct your course to the Navigator's Group . . .

'' . . . From the Navigator's Group, you will proceed to the Feejee Islands . . . These objects, it is presumed, will occupy you until the latter end of October, and when attained as far as may be possible, you will proceed to the port of Sydney . . . From there you will make a second attempt to penetrate within the Antarctic region, south of Van Diemen's Land, and as far west as longitude 45 degrees East, or to Enderby's Land, making your rendezvous on your return at Kerguelen's Land, or the Isle of Desolation . . .

''From the Isle of Desolation, you will proceed to the Sandwich Islands . . . Thence . . . to the northwest coast of America, making such surveys and examinations, first of the territory of the United States on the seaboard, and of the Columbia River, and afterwards along the coast of California, with special reference to the Bay of San Francisco, as you can accomplish by the month of October following your arrival.

''You will then proceed to the coast of Japan, taking in your route as many doubtful islands as possible . . . Having completed this survey, you will proceed to the Straits of Sunda, pass through the Straits of Billiton, which you will examine, and thence to the port of Singapore . . . Having accomplished this service, it is presumed the objects of your enterprise will be accomplished and you will accordingly, after receiving your supplies at Singapore, return to the United States by the Cape of Good Hope . . .

'' . . . Although the primary object of the Expedition is the promotion of the great interests of commerce and navigation, yet you will take all occasions, not incompatible with the great purposes of your undertaking, to extend the bounds of science, and promote the acquisition of knowledge. For the more successful attainment of these, a corps of scientific gentlemen—will accompany the Expedition, and are placed under your direction:

Mr (Horatio) Hale	—Philologist
Mr (Charles) Pickering Mr (Titian Ramsay) Peale	—Naturalists
Mr (Joseph Pitty) Couthouy	—Conchologist
Mr (James Dwight) Dana	—Mineralogist
Mr (William) Rich	—Botanist
Mr (Joseph) Drayton Mr (Alfred T.) Agate	—Draughtsmen
Mr (William D.) Brackenridge	—Horticulturist

'' . . . As guides to yourself and to the scientific corps, the Department would, however, direct your particular attention to the learned and comprehensive reports of a committee of the American Philosophical Society of Philadelphia . . . of the East India Marine Society . . . and to a communication from the Naval Lyceum of New York, (U. S. Naval Lyc. (1833), q.v.), which accompany and are to be regarded as forming part of these instructions, so far as they may accord with the primary objects of the Expedition and its present organization. You will, therefore allow the gentlemen of the scientific corps, the free perusal of these valuable documents, and permit them to copy such portions as they may think proper . . .

"You will adopt the most effectual measures to prepare and preserve all specimens of natural history that may be collected, and should any opportunities occur for sending home by a vessel of war of the United States, copies of information, or duplicates of specimens . . . you will avail yourself of the occasion, forwarding as frequently as may be done with safety, details of your voyage and its most material events, at the same time strictly prohibiting all communications except to this Department, from any person attached to the Expedition, referring to discoveries, or any circumstances connected with the progress of your enterprise . . ." J. K. PAULDING, Sec. Navy, Aug. 11, 1838, in his Instructions to Lt. Charles Wilkes, commanding the Exploring and Surveying Expedition. Extracts from the NARRATIVE of the Expedition. v. 1, pref. p. 25–31. (See Reports, v. 1–5, below.)

Asa Gray was originally selected as the botanist, but resigned in July, 1838. Rich was elevated to the post of botanist and Brackenridge added as horticulturist and assistant botanist.

The Expedition set sail from Hampton Roads, Va., August 19, 1838, and stopped at Madeira for several days. It then recrossed the Atlantic and anchored at Rio de Janeiro for six weeks, until January 7, 1839. The party set sail for Orange Harbor, leaving that place Feb. 26, 1839, and arriving at Valparaiso April 15. The Expedition sailed from Callao for the Pacific Islands on July 13, 1839, and reached Sydney at the close of Nov. 1839.

During the first half of 1840, the Vincennes and its companion vessels cruised in the Antarctic, New Zealand and the Fiji Islands. On the 24th of Sept. 1840, the exploring party reached Honolulu, and after six months sojourn, left on Apr. 6, 1841 for the Columbia River on the northwest coast of the United States, arriving in Apr. 1841, toward the close of the month. The Expedition left this region after several months' exploration and cruised along the Oregon and California coast.

Left San Francisco harbor Nov. 1, 1841 and recrossed the Pacific via Hawaii, the Ladrones and the Philippines. The early part of 1842 was spent here. The return route to New York, where the Exploring Expedition arrived on June 9, 1842, was accomplished via Singapore, Cape of Good Hope, Island of St. Helena. (This brief account of the route is extracted from the paper by Dr J. H. BARNHART—see Bibliography: 1919, below.)

Silliman's review of the Expedition in 1843 (see below Bibliography: 1843) notes that the collections gathered on the five years' tour totalled approximately 6,200 species of animals divided as follows:

	Total	New
Fishes	829	250
Reptiles	140	40
Crustacea	900	600
Insects	1500	500
Shells	2000	250
Zoophytes	300	200
Corals	450	100

Over 10,000 plants and upwards of 50,000 specimens constituted the herbarium collected on the Expedition. All the natural history collections were placed in charge of the then existing NATIONAL INSTITUTION FOR THE PROMOTION OF SCIENCE (1840), q.v., transferred to the Patent Office, and subsequently to the Smithsonian Institution, at the death of the National Institute (see also Smith. Inst. (1846)).

Pickering, Dana, Brackenridge were for a time curators of their respective collections when they were housed in the Patent Office. The plants collected formed the basis of the NATIONAL BOTANIC GARDEN (1852), q.v. The zoological, geological and mineralogical collections formed the basis for the collections of the United States National Museum, an integral part of the Smithsonian Institution.

J. P. Couthouy left the Expedition at Honolulu, Nov. 1840.

Upon the return of the Expedition, the various scientific workers and Wilkes began to work up their Reports for publication, and these appeared at various intervàls between 1844 (Wilkes' Narrative), and 1874. A number of the contemplated volumes were never published. For a list of those which appeared see below (SUMMARY OF VOLUMES). For the contents and bibliographical details see below (REPORTS v. 1–24).

A number of the workers published preliminary reports on the new species and contents of their collections, and these will be found under each volume entitled (PAPERS IN SOCIETY TRANSACTIONS). T. R. Peale who was delegated to write the volume on Mammalia, published it in 1848; but Wilkes's dissatisfaction caused its suppression and Cassin was engaged to prepare another, in its place.

The official government edition of the results of the Exploration were dependent on the restrictions set down in the following:

> "By the act of Congress of Aug. 26, 1846, it was directed that there should be published, under the supervision of the Joint Committee on the Library of Congress, an account of the Exploring Expedition commanded by Commodore Charles Wilkes in a form similar to the 'Voyage of the Astrolabe' published by the government of France. Only 100 copies of the 24 quarto volumes and 11 atlases were printed, a portion of them distributed as follows:—Captain Wilkes, Hudson and Ringgold of the expedition, 1 copy each to the Library of Congress, U. S. Naval Lyceum, at Brooklyn, N. Y., to the states of the Union (the state libraries) and 1 copy each to the friendly powers, France and Great Britain each receiving a second copy." From CHECKLIST of Public Documents. Wash. 1895. 2d ed. p. 176.

The authors of the various volumes were however permitted to reprint their volumes at their own expense, in an edition generally not larger than 250 copies, and a number of the scientists availed themselves of the opportunity. The official edition bears the imprint of C. Sherman, Philadelphia. The other reprints vary with the volume (see separate volumes below—analysis under REPORTS).

Notices of the progress and return of the Expedition may be found in Amer. J. Sc. v. 38, p. 387–89. Jan. 1840; and in v. 43, p. 208–12. July, 1842.

A critical review of the activities and achievements of the Expedition in its geological and mineralogical aspects may be found in MERRILL, (1), p. 423–26. (See Annot. Bib.) See also below in the BIBLIOGRAPHY, the papers by Collins, (1912), Feipel, (1914), and Barnhart, (1919). See also MERRILL. First 100 yrs. Amer. Geol. 1924. p. 189, 286–90.

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Made Feb. 7, 1835. Memorials by various persons requesting the fitting out of an Exploring Expedition.

1836 REYNOLDS, John N. Address on the subject of a surveying and exploring expedition to the Pacific Ocean and South Seas, delivered in the Hall of the House of Representatives on the evening of April 3, 1836, with correspondence and documents. N. Y. Harper, 1836. 300 p.

1838 REYNOLDS, John N., and DICKERSON, Mahlon. Correspondence between . . . under the respective signatures of "Citizen" and "Friend to the Navy," touching the South Sea Surveying and Exploring Expedition. . . N. Y. 1838.

1841 ————. Pacific and Indian Oceans; or, The South Sea Surveying and Exploring Expedition; its inception, progress and objects. N. Y. Harper & bros., 1841. 10 + 516 p.

Reynolds was one of the earliest and most ardent advocates and supporters of the Expedition.

1842 WILKES, Charles. Synopsis of the cruise of the U. S. Exploring Expedition, during the years 1838, '39, '40, '41, and '42; delivered before the National Institute . . . on the twentieth of June, 1842, to which is added a list of officers and scientific corps attached to the Expedition. Wash. 1842. 56 p. map.

Rev. in North Amer. Rev. v. 56, p. 257–70. Apr. 1843. See also Nat. Inst. Prom. Sc. (1840).

1843 ABERT, John James. Reply of Col. Abert and Mr Markoe to the Hon. Mr Tappan of the United States Senate . . . Wash. 1843. 18 p.

Upon a "Bill for the preservation of the collection of natural curiosities forwarded by the Exploring Expedition and from other sources proposing to give to the National Institute custody of objects of natural history belonging to the government."

1843 SILLIMAN Benjamin. United States Exploring Expedition. New Haven, April, 1843. (In Amer. J. Sc. v. 44, p. 393–408)

1844 HOVEY, C[harles] M[ason]. Experimental garden of the National Institute (containing the plants collected on the Wilkes Expedition). Bost. 1844–48. (In Mag. Horticulture & Bot. v. 10, p. 81–2; v. 12, p. 241–43; & v. 14, p. 241–42)

WILKES, Charles. Narrative of the United States Exploring Expedition during the years 1838, 1839, 1840, 1841, 1842. Phila. Printed by C. Sherman, 1844. 5 v. illus. 62 pl. port. 9 maps, plans, tab. atlas. 4°.

The Official Narrative-See below REPORTS v. 1–5, for bibliographical details and contents.

1846 GRAY, Asa. Scientific results of the Exploring Expedition. (In North American Review. v. 63. p. 211–36. July, 1846)

1849 WILKES, Charles. Western America, including California and Oregon, with maps of those regions and of the Sacramento Valley. Phila. Lea & Blanchard, 1849. 130 p.

1850 JENKINS, John S[tilwell]. United States Exploring Expedition: Voyage of the U. S. Exploring Squadron, Commanded by Capt. Charles Wilkes . . . 1838 . . . and 1842 . . . and an account of the Expedition to the Dead Sea under Lieutenant Lynch. . . . Auburn, N. Y. James Alden, 1850. 517 p.

1862 GOULD, Augustus Addison. Otia Conchologia: descriptions of shells and mollusks from 1839 to 1862. Bost. Gould & Lincoln, 1862. 2 + 256 p.

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v. 1, 1835–1887 contains many references to the Exploring Expedition.

1912 COLLINS, Frank S[hipley]. The botanical and other papers of the Wilkes Exploring Expedition. Bost. & Providence, April, 1912. (In Rhodora. v. 14, no. 160, p. 57–68)

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1914 FEIPEL, Louis N. . . . The Wilkes Exploring Expedition: its progress through half a century: 1826–1876. Annapolis, Md., 1914. (In U. S. Naval Inst. Proc. v. 40, no. 5, p. [1323]–50. Sept.–Oct. 1914)

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v. 1–5	Narrative of the Expedition.	Wilkes. 1844.
6	Ethnography and philology.	Hale. 1846.
7	Zoophytes.	Dana. 1848–49.
(8)	Mammology. (Suppressed).	Peale. 1848.
8	Mammology and ornithology.	Cassin. 1858.
9	Races of man and their geographical distribution.	Pickering. 1848.
10	Geology.	Dana. 1849.
11	Meteorology.	Wilkes. 1851.
12	Mollusca and shells.	Gould. 1852–56.
13–14	Crustacea.	Dana. 1852–55.
(15)	see v. 19.	
15	Botany: Phanerogamia.	Gray. 1854–56.
16	Botany: Cryptogamia: Filices, including Lycopodiaceae and Hydropterides.	Brackenridge. 1854–56.
17	Botany: Cryptogamia:	
	Musci	by Sullivant. 1859.
	Lichenes	by Tuckerman. 1862.
	Algae,	by Bailey & *Harvey. 1862.
	Fungi	by Curtis & *Berkeley. 1862.
	Phanerogamia of Pacific N. A.	by Torrey. 1874.
18	Botany (not published)	Gray.
19	Geographical distribution of animals and plants. (Wrongly no. 15)	Pickering. 1854.
20	Herpetology.	Girard. 1858.
21–22	Ichthyology (not published)	Agassiz.
23	Hydrography.	Wilkes. 1858–61.
24	Physics (not published).	Wilkes.

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v. 1–5.

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Wilkes, under the special reprint privilege, pub. 250 copies of which the government received 100.

"Under the copyright privilege he also brought out other and cheaper editions: Phila. Lea & Blanchard, 1845. 5 v. & atlas. Others in 1845, 1849, 1852, 1854; also Phila. 1850. 5 v.; N. Y. G. P. Putnam, 1851 & 1856. 5 v.; Lond. Ingraham, Cooke & Co., 1845, 5 v.; same, 1852. 2 v.; Lond. Whitaker, 1845. 1 v. (cond. & abrdg.) Also Phila. G. W. Gorton, 1849 & N. Y. Putnam. 1 v. (entitled: Voyage around the world) . . . From LIBRARY OF CONGRESS. Printed cards.

CONTENTS:

v. 1 Introduction; instructions; list of officers and men attached to the United States Exploring Expedition; Madeira, Brazil and other South states; Paumotu group; appendix: 455 p. 90 pl. illus. maps.

2 Tahiti; Tahiti and Eimeo, Tutuila, Upolu, Manono, Savaii, Samoan group, New South Wales; Antarctic cruise, New Zealand; appendix. 505 p. 76 pl. illus.

3 Tongataboo. Ovalau, customs of the Feejee group; Rewa, Somu-Somu, Lakemba and Savu-Savu, Mbua Bay and Muthuata, Tye and Sualib, Malolo, Feejee group, Honolulu; appendix. 463 p. 72 pl. illus.

4 Hawaiian group, Kauai and Oahu, Hawaii and Mauna Loa, Kilauea, Hawaii, Maui; Cruise of the Porpoise; Columbia River, Willamette Valley, Walla Walla, Puget Sound and Okenagan; Indian tribes of the interior of Oregon; De Fuca's Straits and the loss of the Peacock; appendix. 574 p. 54 pl. illus.

5 Bowditch Island, Ellice's and Kingsmill group; manners and customs of the Kingsmill Islanders, Columbia River, Southern Oregon, San Francisco to Manilla, Manilla, Sooloo, Singapore, Cape of Good Hope, currents and whaling; appendix. 591 p. 71 pl. atlas. illus.

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Rev. in North Amer. Rev. v. 63, p. 211–36. July, 1846.

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v. 7.

1848 DANA, James Dwight. . . . Zoophytes . . . with a folio atlas of sixty-one plates. Phila. C. Sherman, printer, 1848. 10 + 7–740 p. illus. atlas. 4°. (U. S. Explor. Exped. . . . v. 7)

Author ed., Phila. Lea & Blanchard, 1848 & 1849.

Atlas. 12 p. 61 pl. (partly col.). 56½x37 cm.

Preface written, New Haven, Jan. 1, 1846.

Rev. in North Amer. Rev. v. 63, p. 211–36. July, 1846. Atlas rev. in Amer. J. Sc. v. 58, (ser. 2, v. 8), p. 455. Nov. 1849.

Rev. of "Structure & classification of Z." 132 p. in Amer. Quart. Jour. Agric. & Sc. v. 3, p. 259–64. Apr. 1846.

"The edition on sale being exhausted, the author issued in 1859 a smaller volume to accompany complete copies of the Atlas: Synopsis of the Report on Zoophytes of the U. S. Explor. Exped. around the world under C. Wilkes, U. S. N. commander, in the years 1838–42. New Haven, pub. by the author, 1859." From Printed Cards of LIBRARY OF CONGRESS.

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1846 Dana, J. D. Genera of fossil corals of the family Cyathophyllidae.
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1857 ————. On a new species of Medusae related to Stephanomia, Crystallomia polygonata.
Rd before Amer. Acad. A. & Sc. (1780), Jan. 1857.
In its Mem. n. s. v. 6, pt. 2, p. 459–60, 1 pl. 1858.

(Original v. 8).

1848 PEALE, Titian R[amsay]. . . . Mammalia and Ornithology. . . . Phila. Printed by C. Sherman, 1848. 25, [17]–338 p. 84 pl. 20 illus. 4°. (In U. S. Explor. Exped. . . . v. 8)

Peale, who was one of the naturalists on the expedition, was delegated to write the Final Report on these subjects. On its completion, however, Wilkes regarded it as scientifically unworthy of a place in the set of volumes of the Expedition. He thereupon ordered it suppressed. It was replaced by Cassin's v. 8, see next volume. See also Note by Witmer Stone in Auk. v. 17, p. 179–80. April, 1900.

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v. 8.

1858 CASSIN, John. . . . Mammology and Ornithology . . . with a folio atlas. Phila. J. B. Lippincott & co., 1858. 466 p. illus. atlas of 53 pl. 4°. (U. S. Explor. Exped. . . . v. 8)

Peale's "Report" (see preceding volume), was deemed unsatisfactory and ordered suppressed. Cassin was engaged in 1851 to superintend the preparation of the atlas and later the preparation of the volume. Preface dated May 10, 1858.

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1853 Cassin, John. Description of a new mole of the genus Scalops, from Oregon. . .

Rd before Phila. Acad. Nat. Sc. (1812), Feb. 15, 1853. In its Proc. v. 6, p. 299.

1854 ————. A list of the pigeons of the genus Carpophaga, Selby, in the Academy collection . . . with descriptions and notices of new and little known species.

Rd before Phila. Acad. Nat. Sc. (1812), Dec. 19, 1854. In its Proc. v. 7, p. 227–32.

1855 ————. Notices of some new and little known birds in the collection of the Wilkes Expedition . . . and in the Academy collection. . .

Rd before Phila. Acad. Nat. Sc. (1812), Dec. 18, 1855. In its Proc. v. 7, p. 438–41.

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1848 PICKERING, Charles. . . . The races of man and their geographical distribution. . . . Bost. Little & Brown, 1848. 447 p. 12 pl. map. 4°. (U. S. Explor. Exped. . . . v. 9)

New ed. to which is prefixed an analytical synopsis of the natural history of man, by J. C. Hall. Lond. 1851. 77 + 445 p. 12 col. pl. map.

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1849 DANA, James D[wight]. . . . Geology . . . with a folio atlas of twenty-one plates. N. Y. G. P. Putnam, 1849. 12 + 9–756 p. illus. double map. atlas. 4°. (U. S. Explor. Exped. . . . v. 10)

Atlas. N. Y. 1849. 6 p. 21 pl. 54½ x 37 cm.

Official ed. Phila. C. Sherman, 1849.

Rev. in Amer. J. Sc. v. 58 (ser. 2, v. 8), p. 454–55. Nov. 1849; & in v. 72 (ser. 2, v. 22), p. 452. Nov. 1856. Also rev. in North Amer. Rev. v. 74, p. 301–30. Apr. 1852.

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Rd before Bost. Soc. Nat. Hist. (1830), Dec. 15, 1841.
In its Jour. v. 4, p. 66–105, 137–62. Jan. 1842.
See also Merrill, (1), p. 373. (See Annot. Bib.). See also Merrill: First 100 yrs. Amer. Geol. 1924. p. 222.

1843 ————. Reply to the accusations of J. D. Dana, geolgist to the Exploring Expedition, contained in the American Journal of Science, v. 45, p. 130 & 145, 1843.

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1844 Dana, J. D. Reply to Mr. Couthouy's vindication against the charge of plagiarism.

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Review of the whole controversy is in v. 46, appx. 12 p.

————. On the composition of corals and the production of phosphates, aluminates, silicates, and other minerals, by the metamorphic action of hot water.

In v. 47, p. 135–36. July, 1844.
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1848 ————. Fossils from the Exploring Expedition . . . a fossil fish from Tierra del Fuego.

In v. 55 (ser. 2, v. 5), p. 433–34. May, 1848.

1849 ————. Notes upon Upper California, from observations made on the Wilkes Exploring Expedition. . . .

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————. On the isolation of volcanic action in Hawaii, or volcanoes no safety valves.

Rd before Amer. Assoc. Adv. Sc. (1848), Aug. 15, 1849.
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1850 ————. Extracts from the "Report on Geology." . . . On denudation in the Pacific and eruptions in Hawaii. . . .

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1851 ————. On coral reefs and islands: parts 1–4. . . .

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1852 ————. On coral reefs and islands . . . pts. 5–8.
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Wilkes had extra copies printed in addition to those in the official set.

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1852 GOULD, Augustus Addison. . . . Mollusca and shells . . . with an atlas of plates. Phila. Printed by C. Sherman, 1852–56. 15 + 510 p. atlas. 4°. (U. S. Explor. Exped. . . . v. 12)

Atlas. Phila. C. Sherman, printer, 1856. 16 p. 52 col. pl. [621 fig.] 56½ x 37 cm. 4°.
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Preface dated December, 1851.

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1852 DANA, James Dwight. . . . Crustacea . . . with folio atlas of ninety-six plates. . . . Phila. Printed by C. Sherman, 1852–53. 2 v. chart, tab. 4°. (U. S. Explor. Exped. . . . v. 13–14)

Atlas. Phila. 1855. (Not issued until 1861). 27 p. 96 col. pl.

v. 13 contains p. 1–686; v. 14, p. 687–1618.

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v. 13, pub. 1852; v. 14, 1853; atlas, 1855.

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1851 ————. Conspectus Crustaceorum . . . (cont.). . .
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1853 ————. On the question whether temperature determines the distribution of marine species of animals in depth.
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————. On an isothermal oceanic chart, illustrating the geographical distribution of marine animals.
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1855 ————. On geographical distribution of the Crustacea.
In Amer. J. Sc. (1818), ser. 2, v. 19, p. 6–15. Jan. 1855; & ser. 2, v. 20, p. 168–78, 349–61. Sept. & Nov. 1855.

1856 ————. A review of the classification of the Crustacea with reference to certain principles of classification.
In Amer. J. Sc. (1818), ser. 2, v. 22, p. 14–29. July, 1856.

(v. 15).

Pickering's volume 19 (q.v.) wrongly numbered 15 in some editions

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1854 GRAY, Asa. Botany: Phanerogamia . . . with a folio atlas of one hundred plates . . . part 1. Phila. Printed by C. Sherman, 1854–56. 777 p. atlas. 4°. (U. S. Explor. Exped. . . . v. 15)

Atlas. 4 p. 100 pl. 56½ x 37 cm.
Also 150 copies, N. Y. G. P. Putnam, 1854–57.
Preface in v. 1, dated May 20, 1854.
Rev. in Amer. J. Sc. ser. 2, v. 18 (v. 68), p. 132–33. July, 1854.

Papers in Society Transactions

1849 Gray, Asa. . . . Some account of Argyroxiphium, a remarkable genus of Compositae, belonging to the mountains of the Sandwich Islands.
Rd before Amer. Acad. A. & Sc. (1780), Aug. 8, 1849. In its Proc. v. 2, p. 159–60.

———. On some plants of the order Compositae from the Sandwich Islands.
Rd before Amer. Assoc. Adv. Sc. (1848), Aug. 21, 1849. In its Proc. v. 2, p. 397–98. 1850.

1852 ———. Characters of two new genera of plants of the order Violaceae, discovered by the naturalists of the U. S. Exploring Expedition in Polynesia. . .
Rd before Amer. Acad. A. & Sc. (1780), May 4, 1852, & Sept. 28, 1853. In its Proc. v. 2, p. 323–25; & P. v. 3, p. 48–54, 127–29.

1854 ———. On the affinities of the genus Vavaea, Benth., also of Rhytidantra. . .
Rd before Amer. Acad. A. & Sc. (1780), Oct. 10, 1854. In its Mem. n. s. v. 5, pt. 2, p. 329–36. 1855.

1858 ———. Notes upon some Rubiaceae, collected in the U. S. South Sea Exploring Expedition under Capt. Wilkes, with characters of new species. . .
Rd before Amer. Acad. A. & Sc. (1780), Apr. 13, 1858 & Sept. 13, 1859. In its Proc. v. 4, p. 33–50, 306–18.

1859 ———. Notes upon some Polynesian plants of the order Loganiaceae.
Rd before Amer. Acad. A. & Sc. (1780), Sept. 13, 1859. In its Proc. v. 4, p. 319–24.

1861 ———. Characters of some Compositae in the collection of the U. S. South Sea Exploring Expedition. . .
Rd before Amer. Acad. A. & Sc. (1780), Jan. 30, 1861. In its Proc. v. 5, p. 114–46.

———. Notes on Lobeliaceae, Goodeniaceae . . . of the collection of the U. S. South Exploring Expedition. . .
Rd before Amer. Acad. A. & Sc. (1780), Jan. 30, 1861. In its Proc. v. 5, p. 146–52.

———. Characters of new or obscure species of plants of monopetalous orders in the collection of the South Pacific Exploring Expedition. . .
Com. to Amer. Acad. A. & Sc. (1780), Nov. 13, 1861 & Oct. 14, 1862. In its Proc. v. 5, p. 321–52; Proc. v. 6, p. 37–55.

v. 16.

1854 BRACKENRIDGE, William D[unlop] Botany: Cryptogamia: Filices, including Lycopodiaceae and Hydropterides . . . with a folio atlas of forty-six plates. Phila. Printed by C. Sherman, 1854–56. 8 +357 p. atlas. 46 pl. 4°. (U. S. Explor. Exped. . . . v. 16)

Atlas. Phila. 1856. [7 p.] 46 pl. [81 fig.] Folio.

Begun in 1846, and ready for the press in 1848. Preface written Aug. 1854. Atlas examined in Library N. Y. Bot. Gard. Drawings by William S. Lawrence.

See also BARNHART, J. H. Brackenridge and his book on ferns. (In N. Y. Bot. Gard. Jour. v. 20, p. 117–24. June, 1919)

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v. 17.

1859 GRAY, Asa, ed. . . . Botany; I: Lower Cryptogamia . . . II: Phanerogamia of the Pacific coast of North America. Phila. Printed by C. Sherman, 1859, 1862–74. p. 1–112, 113–514, 55 pl. 4°. (U. S. Explor. Exped. . . . v. 17)

"Pt. 1 Cryptogamia was printed in or before 1862. Of these parts, Musci, by Sullivant, was pub. in a separate ed. in 1859, with letterpress in folio to match the plates. Extra copies of the other three parts (Lichenes, Algae, and Fungi), and the plates of Torrey's "Phanerogamia" were secured by Asa Gray and distributed amongst botanists. When the volume was finally published in 1874, he also secured copies of Torrey's Phanerogams, and had the four parts with the folio plates folded, and bound in 1 volume with title: U. S. Exploring Expedition: Botany; 1) Lower Cryptogamia; 2) Phanerogamia of the Pacific Coast of N. A. It is an imperial volume of 420 p. (p. 113–514), & 29 pl. (See Amer. J. Sc. ser. 3, v. 8, p. 321–22. 1874)" From Printed Cards of LIBRARY OF CONGRESS.

CONTENTS:

p. 1–112 SULLIVANT, William Starling. Musci. 26 pl.

Also pub. separately & first appeared in 1859. Phila. Printed by C. Sherman, 1859. 32 p. 26 pl. folio.

Text printed in folio corresponds to p. 1–112 printed in 1874.

p. [113]–52 Tuckerman, Edward. Lichenes. 2 pl. [31 fig.]
Index, p. 149–52. Pub. 1862.

p. [153]–92 Bailey, Jacob Whitman, and *Harvey, William Henry. Algae. 9 pl. [83 fig.]
Pub. 1862. See also Collins (Bibliography, 1912—above), p. 57. Index, p. 189–92.

p. [193]–202 Curtis, Moses Ashley, and *Berkeley, Miles Joseph. Fungi. 1 pl. [8 fig.]
Pub. in 1862

p. [205]–514 Torrey, John. Phanerogamia of Pacific North America. 17 pl.
Pub. July, 1874. Plates appeared earlier. MS ed. by Asa Gray. Preface dated Apr. 15, 1873. Index, p. 497–514.
Subordinate title: Phaenogamous plants collected in Washington Territory, Oregon and California.

Papers in Society Transactions

1850 *Harvey, W. H., and Bailey, J. W. Descriptions of seventeen new species of Algae collected by the U. S. Exploring Expedition.
Rd before Bost. Soc. Nat. Hist. (1830), Dec. 4, 1850. In its Proc. v. 3, p. 370–73. 1851.

Torrey, John. On the Darlingtonia Californica: a new pitcher-plant from northern California.
Acc. by Smith. Inst. (1846), in Sept. 1850. In its Contributions to Knowledge. v. 6, art. 3, 8 p. 1 pl. Pub. Apr. 1853. Rev. in Amer. J. Sc. v. 66 (ser. 2, v. 16), p. 425. Nov. 1853.

1851 *Berkeley, M. J., and Curtis, M. A. Descriptions of new species of fungi collected by the United States Exploring Expedition. . .
In Amer. J. Sc. (1818), v. 61 (ser. 2, v. 11), p. 93–5. Jan. 1851.

1853 *Harvey, W. H., and Bailey, J. W. New species of Diatomaceae collected by the U. S. Exploring Expedition. . .
Rd before Phila. Acad. Nat. Sc. (1812), Oct. 1853. In its Proc. v. 6, p. 430–32.

1853 Sullavant, W. S. Notices of new species of Mosses from the Pacific Islands.
Rd before Amer. Acad. A. & Sc. (1780), Dec. 27, 1853, & Jan. 31, 1855. In its Proc. v. 3, p. 73–81, 181–85.

v. 18. Not Published.

Was intended as another volume on botany by Asa Gray.

v. 19.

1854 PICKERING, Charles. The geographical distribution of animals and plants. Bost. Little, Brown & co., 1854. 168 + 44 p. 4°. (U. S. Explor. Exped. . . . v 19)

Erroneously numbered 15 in the reprint volumes.
Official ed. of this volume never distributed.

CONTENTS:

168 p. pt. 1	Chronological observations on introduced animals and plants.
44 p.	Index.

v. 20.

1858 GIRARD, Charles. . . . Herpetology . . . with a folio atlas. Phila. J. B. Lippincott & co., 1858. 17 + 496 p. atlas 32 col. pl. [649 fig.] 4°. (U. S. Explor. Exped. . . . v. 20)

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2 Ophidia 105
3 Sauria 193
4 Chelonia 425
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Papers in Society Transactions

1852 Baird, S. F., and Girard, Charles. Descriptions of new species of reptiles collected by the Wilkes Expedition. . .

Pt. 1 Species from the western coast of America.
2 Species of Batrachians exotic to N. A.

Rd before Phila. Acad. Nat. Sc. (1812), Oct. 5, 1852 & Oct. 18, 1853. In its Proc. v. 6, p. 174–77, 420–24.

1857 Girard, Charles. Descriptions of some new reptiles collected by the Wilkes Expedition . . . pt. 3–4.

Pt. 3 Ophidians exotic to N. A.
4 Saurians exotic to N. A.

Rd before Phila. Acad. Nat. Sc. (1812), Aug. 11 & Nov. 17, 1857. In its Proc. v. 9, p. 181–82, 195–99.

v. 21 & 22 Not Published.

Were to have been Agassiz's Report on Ichthyology. Below are given papers published by Agassiz on some of the materials and specimens collected on the Expedition.

Papers in Society Transactions

1855 Agassiz, Louis. Synopsis of the ichthyological fauna of the Pacific slope of North America, chiefly from the collections made by the U. S. Exploring Expedition under . . . Wilkes . . . with recent additions and comparisons. . .

In Amer. J. Sc. (1818), ser. 2, v. 19 (v. 69), p. 71–99, 215–31, illus. Jan. & Mar. 1855.

1924 FOWLER, H. W., and BEAN, B. A. Descriptions of eighteen new species of fishes from the Wilkes Exploring Expedition, preserved in the United States National Museum. Wash. 1924. 27 p. (In U. S. Nat. Mus. Proc. v. 63, art. 19. no. 2488)

v. 23.

1858 WILKES, Charles. . . . Hydrography . . . Phila. Printed by C. Sherman, 1858–61. 514 p. atlas (of 106 charts). 4°. (U. S. Explor. Exped. . . . v. 23)

v. 24 Not Published.

Was to have been Wilkes' Report on Physics.

AGRICULTURAL, HORTICULTURAL AND BOTANICAL SOCIETY OF JEFFERSON COLLEGE, WASHINGTON, MISSISSIPPI (1839)

History

"The Association shall be called the Agricultural, Horticultural and Botanical Society of Jefferson College, Washington, Mississippi.

"The objects of its establishment are:

"1) Acquisition and dissemination of useful knowledge, connected with agricultural and horticultural pursuits . . .

"2) The cultivation of a taste for rural improvements. . . .

"3) The planting and embellishing of the college grounds; to render them more pleasing and attractive, as well as to the visitor as to the student; and to facilitate the latter in the acquisition of botanical science."

The Society was organized, April, 1839 with B. L. C. Wailes as its first presiding officer and chief scientific worker. Below are given the titles of two Addresses delivered by Wailes in 1841 and 1842.

Publications

1841 WAILES, B. L. C. Address delivered in the College Chapel before the Agricultural, Horticultural and Botanical Society of Jefferson College . . . on the 24th of April, 1841, Washington, Miss. Natchez, 1841. [31] p.

1842 ————. Address delivered at Washington, Miss., before the Agricultural, Horticultural and Botanical Society . . . on the 29th of April, 1842. Natchez, 1842. [20] p.
Constitution, p. 17–9; Officers, p. 20.

NEW HAMPSHIRE GEOLOGICAL SURVEY (1839)

''Long anterior to the actual commencement of the Geological and Mineralogical Survey of New Hampshire, public spirited individuals and executive officers of the government had contemplated the exploration of the natural resources of the state.

''Governor Woodbury, in his message to the legislature in June, 1823, recommended an agricultural survey, with a view to the chemical analysis of the various kinds of soils. . . .

''Subsequently, Governor Hill urged the propriety of authorizing a geological and mineralogical survey, with a view to the advancement of agriculture and the arts.

''During the administration of Governor Page, and by his earnest recommendation, the legislature of New Hampshire passed an act which authorized a geological and mineralogical survey of the state. This act was approved on the 24th of June, 1839, and measures were immediately taken to secure the services of a mineralogist and a geologist.

''On the 10th of September, 1839, I received a commission from the executive department, authorizing me to make this survey, and according to agreement, entered upon the duties of the office on the 1st of June, 1840. . . .

''It may be proper to state that the annual expenses, including the salary of the geologist and the pay of assistants, with that paid out for labor, transportation, etc., never amounted to more than $3,000 per annum, so that the three years' work cost $9,000. . . .'' JACKSON. Final Rept. 1844. p. 26–8.

Jackson's assistants during the period of the survey were: J. D. Whitney, appointed Dec. 7, 1840, and served through the winter; Moses B. Williams, June, 1841 and that summer; E. E. Hale; Eben Baker, 1842; William F. Channing, June 7, 1842 and that summer, John F. Chandler, 1842.

For discussion of the geological aspects of the survey, see also MERRILL, (1), p. 358–60. (See Annot. Bib.)

A list of the state documents relative to the Survey is in Hasse, (2), pt. 2, May, 1907, p. 45–6. Those before 1865 are given in the BIBLIOGRAPHY below.

Jackson's first report was made in 1842, the second in 1842, and the Final, in 1844, which included both the preliminary ones.

See also Merrill (Bibliography: 1920: below), for a history of the state surveys up to 1885. See also MERRILL. First 100 yrs. Amer. Geol. 1924. p. 204–6.

Bibliography

1836. NEW HAMPSHIRE. GOVERNOR. Advisability of the state geological survey. (In Governor's Message. June, 1836)

1839 ————. Adoption of measures for commencing geological survey of state recommended. (In Governor's Message. June, 1839)

1840 ————. Progress of state geological survey. (In Governor's Message. Nov. 1840)

1843 JACKSON, C. T. Letter of state geologist giving contents and make-up of proposed geological report. (In N. H. H. Jour. Je. 1843. p. 301–2)

1844 NEW HAMPSHIRE. Statement of progress on geological report; printing and cost thereof. (In H. Jour. Je. 1843. p. 260)

————. Secretary of State. Report of . . . on printing of the Report of the Geological Survey. (In H. Jour. Nov. 1844. p. 401–2)

JACKSON, C. T. History of the survey . . . Concord, N. H., 1844. (In his Final Rept. Geol. Surv. N. H. p. 26–8)

1874 HITCHCOCK, Charles Henry. History of geological surveys in New Hampshire. Concord, N. H., 1874. (In his Geol. N. H. v. 1, p. 3–12)

———— and others. The geology of New Hampshire; A report comprising the results of explorations ordered by the Legislature. Concord, N. H., 1874–78. 3 v. illus. pl. maps. 4°.

UPHAM, Warren. History of explorations among the White Mountains. Concord, N. H., 1874. (In HITCHCOCK, C. H. Geol. N. H. v. 1, ch. 4, p. 59–118)

1877 HITCHCOCK, Charles Henry. History of opinions respecting the age and elevation of the White Mountains. Concord, N. H., 1877. (In his Geol. N. H. v. 2, p. 184–98)

1920 MERRILL, George P[erkins], ed. New Hampshire Geological Surveys. Washington, Gov't print. office, 1920. (In U. S. Nat. Mus. Bull. no. 109. p. 299–307)

Reports

1841 JACKSON, Charles Thomas. First annual report on the geology of the state of New Hampshire. Concord, N. H., Cyrus Barton, state printer, 1841. 164 p. illus.

Repr. in his Final Report, 1844. p. 29–89.
Report made, June 1, 1841.
Contains also:

Whitney, J. D., and Williams, M. B., Report on the selection from Portsmouth to Claremont, through Concord. p. 45–51.
Also in Final Rept. p. 49–52.

———. Geology and topography of the northern corner of the state, section from Concord to Wakefield; section from Wakefield to Haverhill and examination of the country adjacent to Lake Winnipissiogee. p. 83–93.
Also in Final Rept. p. 67–73.

1842 ———. Second annual report on the geology of the state of New Hampshire. Concord, N. H., Cyrus Barton, 1842. 8 p.
Also in N. H. H. Jour. June, 1842. p. 239–44.
Repr. in Final Rept. 1844. p. 91–118.

1844 ———. Final report on the geology and mineralogy of the state of New Hampshire; with contributions towards the improvement of agriculture and metallurgy . . . Concord, N. H., Carroll & Baker, state printers, 1844. 8 + 376 p. illus. 9 pl. map.
Rev. by T. T. Bouvé in Amer. J. Sc. (1818), v. 49, p. 27–37. July, 1845. Rd before Bost. Soc. Nat. Hist. (1830), Mar. 5, 1845.
Also rev. in Amer. Quart. Jour. Agric. & Sc. (1845), v. 1, p. 232–40. Apr. 1845.

Contents:

Contains also:

p. 3–5 Laws of the Legislature of New Hampshire authorizing the Mineralogical and Geological Survery of the state.
p. 6–8 Introductory letter to the governor. June, 1844.
p. 9–26 Preliminary remarks.
p. 28–89 First annual report (for 1840)–pub. 1841. See above,

Contains also

p. 49–52 Whitney, J. D., and Williams, M. B. Report. . . See 1841, above.
p. 67–73 ———. Geology & topography. . . See 1841, above.
p. 91–118 Second year's survey (for 1841), pub. 1842.
p. 119–64 Third year's survey (for 1842).
p. 165–237 Economical geology.
p. 239–78 Agricultural geology and chemistry.
p. 279–81 Hayes, J. L. Letter relative to the geology of Portsmouth. July 8, 1841.
p. 279–318 Appendix to the Geological report.
p. 282 Pierce, Eri. Letter, May 15, 1843.
p. 319–64 Appendix to agricultural geology and chemistry.
p. 365–70 Glossary.
p. 371–76 Index & errata.

1845 ———. Views and maps of New Hampshire. Bost. 1845. 20 p. 8 pl. 4.°

OWEN'S EXPLORATION OF IOWA, WISCONSIN AND ILLINOIS (1839)

History

"By resolution of the House, Feb. 6, 1839, 'The President of the United States was requested to cause to be prepared . . . a plan for the sale of the public mineral lands, having reference as well to the amount of revenue to be derived from them . . . and that he at the same time communicate to Congress all the information in possession of the Treasury Department relative to their location, value, productiveness and occupancy, and that he cause such further information to be collected, and surveys to be made' . . ."

"Instructions required me to proceed to Iowa, and undertake an exploration of all the lands in the Mineral Point and Galena Districts, which are situated south of the Wiskonsin and north of the Rock River, and west of the line dividing the ranges eight and nine east of the fourth principal meridian; together with all the surveyed lands in the Dubuque District." OWEN, D. D.

Owen received his instructions August 8, 1839, and completed the survey in the record time of two months and six days. Work was begun Sept. 17, and completed Nov. 24, 1839. He was assisted by John Locke and Ebenezer Phillips. His Report was rendered April 2, 1840, and published the same year, and reprinted in 1844 and 1845. See also MERRILL, (1), p. 351–53, (see Annot. Bib.) for critical notes on the geology of the survey. See also MERRILL. First 100 yrs Amer. Geol. 1924. p. 196–99.

Report and Bibliography

(1) House ed. 26th Cong. Serial no. 368.

1840 OWEN, David Dale. Report of a geological exploration of Iowa, Wiskonsin, and Illinois, made under instructions from the Secretary of the Treasury of the United States, in the autumn of the year 1839, by D. D. Owen, principal agent to explore the mineral lands of the United States, assisted by John Locke and E. Phillips. Washington, 1840. 161 p. 18 pl. [86 fig.] maps, charts, sect. (In U. S. 26th Cong., 1st sess., H. Doc. v. 6, no. 239.) Serial no. 368.

(2) House ed. 28th Con. Serial no. 467.

1845 ————. Same . . . (In U. S. 28th Cong. 2d sess., H. Ex. Doc. v. 4, pt. 2, no. (168)). Serial no. 467.

Repr. Wash. 1845. Doc. is no. 239, but follows no. 167 in this ed., & has therefore been called, no. 168. Actual repr. of (1) House ed.

(3) Senate ed. Serial no. 437.

1844 ———. Same . . . Wash. 1844. 191 p. illus. 18 pl. maps, charts, sect. (In U. S. 28th Cong., 1st sess., Sen. Doc. v. 7, no. 407.) Serial no. 437.

Repr. of (1) & (2), with slight changes of text and inclusion of illustrations.

Rev. in Amer J. Sc. v. 52, (ser. 2, v. 2), p. 294–95. Sept. 1846.

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p. 7– 8 OWEN, D. D. Preliminary report. (3), p. 7–10.

p. 11–115 ———. Geological report. (3), p. 11–145.

General report: situation and extent of territory explored. p. 13–33. (3), p. 15–42.

Statistics of the lead region. p. 33–57. (3), p. 42–86.

List of principal localities of metallic ores. p. 58–64. (3), p. 87–94.

Catalogue of the different varieties of geological and mineralogical specimens collected in Iowa, Wisconsin & Illinois. p. 65–9. (3), p. 95–9.

Description of some organic remains figured in this work, supposed to be new. (3), p. 69–86, 8 pl. 86 fig.

. . . Description of each township. p. 70–115. (3), p. 100–45.

p. 116– 59 LOCKE, John. Report. (3), p. 147–89.

p. 159– 61 PHILLIPS, Ebenezer. Report on the timber, soil and productiveness of the mineral district. (3), p. 189–91.

RHODE ISLAND GEOLOGICAL SURVEY (1839)

History

"In the latter part of the thirties the increasing desire of the people to know more about the natural resources of the state culminated in Rhode Island in the formation of a state survey, which in common with the times, was both geologic and agricultural in its purpose. The organization of this survey was largely due to the efforts of the Rhode Island Society for the Promotion of Domestic Industry whch in December, 1838, appointed four men to confer with the committee appointed by the General Assembly and appropriated five hundred dollars ($500) of the Society's funds, provided the state should appropriate the balance necessary to conduct a survey of the state. Accordingly at the session of 1839, a resolution appropriating two thousand dollars ($2,000) was passed . . . Dr C. T. Jackson, geologist of the state of Maine . . . was asked to make the Survey, and the contract with him was signed in April, 1839 . . . His ''Report'' was submitted to the Committee, May 25, 1840 . . .'' HAYES, p. 130. (U. S. Geol. Sur. Bull. no. 465).

This was the only survey conducted under state auspices up to the present time. Jackson was assisted by, during the course of the Survey, John Chandler, Jr., Moses B. Williams, Henry Sumner, Ebenezer Baker and Owen Mason.

For a critical review of the geologic aspects of the Survey, see MERRILL, G. P., (1), p. 347–48. For a list of the state documents concerned with the Survey, see HASSE, (2), R. I., p. 69.

A MS of a collection of rocks, minerals, etc., made during the survey was placed in the hands of the officers of the PROVIDENCE FRANKLIN SOCIETY (1821), q.v., which published it in 1887 (see below). See also MERRILL. First 100 yrs Amer. Geol. 1924. p. 192–93.

Bibliography

1839 JACKSON, Charles Thomas. Catalogue of rocks, minerals, and soils, collected during the Geological Survey of Rhode Island, summer of 1839.

Ms. Pub. in PROVIDENCE FRANKLIN SOCIETY. Geol. of R. I. 1887. p. 58–68.

1887 PROVIDENCE FRANKLIN SOCIETY. Index of publications bearing upon the geology and mineralogy of Rhode Island, chronologically arranged. Providence, 1887. (In its Rept. Geol. R. I. p. 2–57)

An annotated list.

1920 MERRILL, George P[erkins], ed. Rhode Island Geological Surveys. Washington, Gov't print. office, 1920. (In U. S. Nat. Mus. Mus. Bull. no. 109. p. 456–59)

Report

1840 JACKSON, Charles T[homas]. Report on the geological and agricultural survey of the state of Rhode Island made under a resolve of legislature in the year 1839. Providence, Pub. by B. Cranston & co., 1840. 312 p. illus. 7 pl. [12 fig.] tab.

Rev. by Benjamin Silliman, Jr., in Amer. J. Sc. v. 40, no. 1, p. 182–94. Jan. 1841.

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121– 36 Remarks on the origin of soils.
137– 75 Agricultural statistics collected during the Survey.
177– 83 Agricultural observations on the Island of Rhode Island.
185–246 Remarks on the importance of the chemical analysis of soils.
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303– 10 Explanation of geological terms.
311– 12 Index.

ASSOCIATION OF AMERICAN GEOLOGISTS AND NATURALISTS (1840)

History

" . . . Another important result of the New York Survey was the origination of the Association of American Geologists, which has gradually expanded into the American Association for the Advacement of Science (1848), [q.v.]. Many of us, who were engaged in the State Surveys, were so isolated from one another, that we had few means of comparing views, or obtaining advice in our conclusions. Professor Mather, I believe, through Prof. Emmons, first suggested the subject of a meeting to the Board of Geologists in November, 1838, in a letter proposing several points for their consideration, I quote from that letter the following paragraph relating to that meeting. As to the credit he has here given me of having previously suggested the subject, I can only say that I had been in the habit for several years of making this meeting of scientific men a sort of hobby, in my correspondence with such . . . I will merely quote Prof. Mather's language to the Board: 'Would it not be well,' says he, 'to suggest the propriety of a meeting of the geologists and other scientific men of our country at some central point next fall, say, in New York or Philadelphia. There are many questions in our geology, that will receive new light from friendly discussions and the combined observations of various individuals who have noted them in various parts of our country. Such a meeting has been suggested by Prof. Hitchcock, and to me it seems desirable. It would undoubtedly be an advantage not only to science, but to the several surveys that are now in progress, and that may in the future be organized. It will tend to make known our scientific men to each other personally; give them more confidence in each other, and cause them to concentrate their observations on those questions that are of interest either in a scientific or a commercial point of view. More questions may be satisfactorily settled in a day by oral discussion, than in a year by writing and publication.'

"Though the Board adopted the plan of a meeting, various causes delayed the first one till April (2), 1840, when we assembled in Philadelphia (at the rooms of the Franklin Institute), and spent a week in most profitable and pleasant discussion and the presentation of papers. Our number that year was only 18, because confined almost exclusively to the state geologists; but the next year, when we met again in Philadelphia (in the rooms of the Academy of Natural Sciences), and a more extended invitation was given, about 80 were present, and their numbers have been increasing to the present time. The principal changes have been those of expansion, and the consequent introduction of many other branches of science, with their eminent cultivators. In 1842, we changed the name to that of the ASSOCIATION OF AMERICAN GEOLOGISTS AND NATURALISTS; and in 1847, to that of the AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE (1848), q.v. . . ." HITCHCOCK, Edward. Address at the opening of Geological Hall, Albany, N. Y., Aug. 27, 1856. (In N. Y. State. Regents of Univ. State N. Y. 10th Ann. Rept. on condition State Cab. Nat. Hist. Albany, 1857. p. 23–5).

The members present at the first meeting were Edward Hitchcock, L. C. Beck, H. D. Rogers, Lardner Vanuxem, W. W. Mather, Walter R. Johnson, T. A. Conrad, Ebenezer Emmons, James Hall, Charles B. Trego, M. H. Boyé, R. E. Rogers, Alexander McKinley, C. B. Hayden, R. C. Taylor, Douglass Houghton and Bela Hubbard.

Eight annual meetings were held during the life of the Association under its old name, the places of meeting, dates of meeting and officers of which are tabulated below.

Abstracts of the Proceedings of the Association were published in 1841, 1842, 1843, 1844 and 1845. That of 1843 contained the Reports of the meetings held in 1840, 1841 and 1842. That of 1841 was combined with Hitchcock's "Anniversary Address." That of 1842 was combined with Silliman's Address. That of 1844 was published in conjunction with Rogers' "Address." Abstracts were also published in the American Journal of Science (1818), in which many of the papers were also printed in full. For 1845 and 1847 abstracts were also published in the American Quarterly Journal of Agriculture & Science (1845), q.v. (For details see BIBLIOGRAPHY, below). Those for 1846, were published in the New York newspapers of the day (see below, BIBLIOGRAPHY: 1846).

Meetings and Officers

No.	Year	Date	Place	President	Secretary
1	1840	Apr. 2–4	Phila.	Edward Hitchcock	L. C. Beck
2	1841	Apr. 5–10	Phila.	Benjamin Silliman	"
3	1842	Apr. 25–30	Boston	S. G. Morton	C. T. Jackson
4	1843	Apr. 25–May 2	Albany	H. D. Rogers	B. Silliman, Jr.
5	1844	May 8–14	Wash. D. C.	John Locke	B. S., Jr. & O. P. Hubbard
6	1845	Apr. 30–May 6	New Haven	W. B. Rogers	B. S., Jr., & J. L. Smith
7	1846	Sept. 2–8	New York	C. T. Jackson	B. Silliman, Jr.
8	1847	Sept. 20–25	Boston	W. B. Rogers	Jeffries Wyman

Bibliography and Publications

P (Proceedings); R (Reports)

See also the titles under Amer. Assoc. Adv. Sc. (1848):

Bibliography

1840 ANON. Organization and proceedings for meetings held April 2–4, 1840. (In Amer. J. Sc. v. 39, p. 189–91. July, 1840)

Gives names of the members present. Repr. in Reports (R.), 1843. p. 9–11 (see 1843 below).

P. 1841.

1841 HITCHCOCK, Edward. First anniversary address before the Association of American Geologists at their second annual meeting in Philadelphia, April 5, 1841; with an abstract of the proceedings of the Association, in 1840 and 1841. New Haven, B. L., Hamlen, 1841. 48 + 34 p.

Hitchcock's "Address" also in Amer. J. Sc. (1818), v. 41, p. 232–75. Oct. 1841.

Abstr. of Proceedings also in Amer. J. Sc. v. 41, p. 158–89. July, 1841.

Abstr. of Proceedings also repr. in Reports. (R), 1843, p. 11–41 (see 1843 below).

Hitchcock's "Address", is a "brief sketch of the most important points in American geology".

P. 1842.

1842 SILLIMAN, Benjamin. . . . Address before the Association of American Geologists and Naturalists; with an abstract of the Proceedings at their meeting, held in Boston, April 25–30, 1842. N. Y. Wiley & Putnam, 1842. 36 + 39 p.

Silliman's "Address" repr. in Amer. J. Sc. (1818), v. 43, p. 217–50. Oct. 1842. Deals with "The dignity and importance of geology . . . " For full title, see below, under PAPERS, April 26, 1842: Silliman.

Abstr. of Proceedings also in Amer. J. Sc. v. 43, p. 146–84. July, 1842.

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R. 1843.

1843 ASSOCIATION OF AMERICAN GEOLOGISTS AND NATURALISTS. Reports of the first, second, and third meetings of the . . . at Philadelphia, in 1840 and 1841, and at Boston in 1842, embracing its proceedings and transactions. Bost. Gould, Kendall & Lincoln, 1843. 544 p. 21 pl. [196 fig.] maps, sect. 4.°

Contains Proc. for 1840 (see above), p. 9–11; for 1841, p. 11–41; for 1842, p. 42–79; Constitution, p. 77–8; Members, p. 78–9. The rest of the volume contains papers read during these various meetings, for contents of which, see below PAPERS ON NATURAL HISTORY. Does not include either Hitchcock's or Silliman's ''Address'' given in the special publications noted above, under 1841 & 1842.

————. Abstract of the Proceedings of the fourth session of the . . . (In Amer. J. Sc. v. 45, p. 135–65, 310–53. July & Oct. 1843)

P. 1844.

1844 ROGERS, Henry D[arwin]. Address delivered at the meeting of the Association of American Geologists and Naturalists, held in Washington, May, 1844, with an abstract of the proceedings of their meeting. N. Y. Wiley & Putnam, 1844. 58 + 43 p.

Rogers' ''Address'' entitled: ''Brief history of the recent labors of American geologists and a rapid survey of the present condition of geological research in the United States'' repr. in Amer. J. Sc. v. 47, p. 137–60, 247–78. July & Oct. 1844.

Abstr. of Proceedings in Amer. J. Sc. v. 47, p. 94–134. July, 1844.

P. 1845.

1845 ASSOCIATION OF AMERICAN GEOLOGISTS AND NATURALISTS. Abstract of the Proceedings of the sixth annual meeting of the . . . April, 1845. New Haven, B. L. Hamlen, 1845. 87 p.

Abstr. also repr. in Amer. Quart. Jour. Agric. & Sc. v. 2, p. 132–70. July, 1845.

1846 ————. Seventh meeting of the . . . held in New York City, Sept. 2–8, 1846, and proceedings . . . (In New York Herald for Sept. 3, 4, 5, 7, 8, 9, 1846)

Sept. 3, p. 2, 5th column; Sept. 4, p. 1, 2d column; Sept. 5, p. 3, 1st column; Sept. 7, p. 2, 4th column; Sept. 8, p. 1, 1st column.

1847 ————. Eighth annual meeting of the . . . held at Boston, September 20–25 and proceedings . . . (In Amer. J. Sc. v. 54

(ser 2, v. 4), p. 427–29. Nov. 1847; & v. 55 (ser. 2, v. 5), p. 102–16, 243–50, illus. Jan. & Mar. 1848)

Abstr. also in Amer. Quart. Jour. Agric. & Sc. v. 6, p. 208–19 & 246–67. Oct. & Nov. 1847. Pagination in Nov. no. erroneously given as p. 198–219, instead of p. 246–67.

1857 HITCHCOCK, Edward. Address at the opening of the Geological Hall at Albany, N. Y., Aug. 27, 1856. (In N. Y. State. 10th Ann. Rept. State Cab. Nat. Hist. Albany, 1857. p. 23–5)

For extracts see History, above. See also Frederick Tuckerman. E. H. and the origin of the Assoc. of Amer. Geol. (In Science, n. s. v. 60, p. 134–35. Aug. 8, 1924.)

Papers on Natural History

1840 Anon. Proceedings. R. 1843. p. 9–11. Rd Apr. 2–4.

Repr. Amer. J. Sc. v. 39, p. 189–91. July, 1840.

No formal papers were read, but there were a number of oral discussions.

1841 Locke, John. On the geology of some parts of the United States west of the Alleghany Mountains. R. 1843. p. 13–4. Rd Apr. 6.

Also in Amer. J. Sc. v. 41, p. 160–61. July, 1841.

———. On a new species of Trilobite of very large size (Isotelus Megistos). R. 1843. p. 14, 221–24, 1 pl. Rd Apr. 6.

Also in Amer. J. Sc. (1818), v. 42, p. 366–68, 1 pl. April. 1842.

Redfield, W. C. . . . Fossil shells from the Tertiary marlbeds at Washington, N. C. R. 1843. p. 14. Rd Apr. 6.

Also in Amer. J. Sc. v. 41, p 161. July, 1841.

Beck, L. C. On the sulphur springs of the state of New York. R. 1843. p. 15–6. Rd Apr. 6.

Also in Amer. J. Sc. v. 41, p. 162–63. July, 1841.

Jackson, C. T. . . . Specimens of minerals, fossils, . . . from New England. R. 1843. p. 14–5. Rd Apr. 6.

Also in Amer. J. Sc. v. 41, p. 161–62. July, 1841.

Hubbard, O. P. . . . Impressions in slate found at Waterville, Maine. R. 1843. p. 16. Rd Apr. 6.

Also in Amer. J. Sc. v. 41, p. 163. July, 1841.

Vanuxem, Lardner, and others. Report of a committee on the Ornithichnites or foot-marks of extinct birds, in the new red sandstone of Massachusetts and Connecticut observed and described by Prof. Hitchcock. R. 1843. p. 18–21. Rd Apr. 7.

Also in Amer. J. Sc. v. 41, p. 165–68. July, 1841. Other members of Committee were E. Emmons, H. D. Rogers, T. A. Conrad, & R. C. Taylor.

REDFIELD, W. C. . . . Specimens of fossil fishes from the red sandstone formations of Connecticut, New York, and Massachusetts. R. 1843. p 17–8. Rd Apr. 7.

Also in Amer. J. Sc. v. 41, p. 164–65. July, 1841.

VANUXEM, Lardner. On the ancient oyster shell deposits observed near the Atlantic coast of the United States. R. 1843. p. 21–3 Rd Apr. 7.

Also in Amer. J. Sc. v. 41, p. 168–70. July, 1841.

BAILEY, J. W. A sketch of the Infusoria, of the family Bacillaria, with some account of the most interesting species which have been found in a recent or fossil state in the United States. R. 1843. p. 23, 112–64, 3 pl. [117 fig.] Rd Apr 7 & 8.

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ROGERS, R. E. On the magnesian character of limestones . . . R. 1843. p. 24. Rd Apr. 8.

Also in Amer. J. Sc. v. 41, p. 171. July, 1841.

MATHER, W. W., and others. . . . On joints in rocks . . . R. 1843. p. 24–6. Rd Apr. 8.

Also in Amer. J. Sc. v. 41, p. 172–73. July, 1841. Discussion by Douglass Houghton, Edward Hitchcock, C. T. Jackson, H. D. Rogers & Mather.

HITCHCOCK, Edward. First anniversary address before the Association . . . [Brief sketch of the most important points in American geology]. Rd Apr. 8.

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HARLAN, Richard. On models of the fossil remains of the Dinotherium giganteum. R. 1843. p. 31–2. Rd Apr. 9.

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NICOLLET, J. N. Some remarks . . . upon the geology of the region of the Upper Mississippi, and the Cretaceous formation of the upper Mississippi. R. 1843. p. 32–4. Rd Apr. 9.

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See also Nicollet's Explor. Upper Mississippi (1836).

HODGE, J. T., and CONRAD, T. A. Observations on the Secondary and Tertiary formations of the southern Atlantic states by J. T. Hodge; with an appendix, by T. A. Conrad. R. 1843. p. 34–5, 94–111, 1 pl. [18 fig.] Rd Apr. 9.

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TAYLOR, R. C. Notice of a model of the western portion of the Schuylkill or southern coal-field of Pennsylvania, in illustration of an address to the Association of American Geologists, on the most appropriate modes for representing geological phenomena. R. 1843. p. 29, 81–94, 1 pl. Rd Apr. 9.

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HOUGHTON, Douglass. Some remarks upon the subject of the metalliferous veins of the northern peninsula of Michigan. R. 1843. p. 35–8. Rd Apr. 9.

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1842 LOCKE, John. Sections of the rocks of the lead regions of the Upper Mississippi, with remarks on the geology of the west. R. 1843. p. 43–5. Rd Apr. 25.

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Remarks by C. T. Jackson, Charles Lyell, Benj. Silliman, W. C. Redfield, H. D. Rogers & J. P. Couthouy. R. 1843. p. 46–9. In P. 1842. p. 6–9. Also in Amer. J. Sc. v. 43, p. 151–54. July, 1842.

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COUTHOUY, J. P. Observations and remarks concerning icebergs. R. 1843. p. 49–59. Rd Apr. 26.

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SILLIMAN, Benjamin. . . . Of the dignity and importance of geology; of its object, means and ends; of its progress and present condition, especially in the United States; of its desiderata and difficulties; and of some of the powers or dynamics by which its results are produced. R. 1843. p. 59. Rd Apr. 26.

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VANUXEM, Lardner. On the origin of mineral springs. R. 1843. p. 224–29. Rd Apr. 26.

BECK, L. C. On some pseudomorphous minerals of the state of New York. R. 1843. p. 241–53. Rd Apr. 26.

LOCKE, John. Ancient earthworks in Ohio. R. 1843. p. 229–38, illus. 1 pl. Rd Apr. 27.

HITCHCOCK, Edward. Description of five new species of fossil footmarks, from the red sandstone of the valley of the Connecticut River. R. 1843. p. 254–64, 1 pl. Rd Apr. 28.

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————. Notice of a prostrate forest under the diluvium of Ohio. R. 1843. p. 240–41. Rd Apr. 28.

DEWEY, Chester. On the polished rocks of Rochester, N. Y. R. 1843. p. 264–66.

HITCHCOCK, Edward. Description of several species of fossil plants from the new red sandstone formation of Connecticut and Massachusetts. R. 1843. p. 294–96, 1 pl. Rd Apr. 28.

HALL, James. Notes explanatory of a section from Cleveland, Ohio, to the Mississippi River, in a southwest direction, with remarks upon the identity of the western formations with those of New York. R. 1843. p. 267–93, 1 pl. Rd Apr. 28.

JACKSON, C. T. Description of the tin veins of Jackson, N. H. R. 1843. p. 316–21, illus. Rd Apr. 28.

TESCHEMACHER, J. E. Description of the oxide of tin found at the tourmaline locality. Chesterfield, Mass. R. 1843. p. 296–97, illus. Rd Apr. 29.

JACKSON, C. T. Remarks on zinc, lead, and copper ores of New Hampshire. R. 1843. p. 321–22. Rd Apr. 29.

ROGERS, W. B. On the age of the coal rocks of eastern Virginia. R. 1843. p. 68, 298–316, 1 pl. Rd Apr. 29.

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——————. On the porous anthracite or natural coke of eastern Virginia. R. 1843. p. 68. Rd Apr. 29.

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——————. On the connection of thermal springs in Virginia, with anticlinal axes and faults. R. 1843. p. 69, 323–47, 1 pl. Rd Apr. 29.

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Specimens sent by E. Burgess, N. Ward, E. C. Bridgman, Justin Perkins, Story Hebard, Benj. Schneider, O. P. Powers, Henry Homes, J. L. Merrick, H. J. Van Lennep, J. J. Robertson, Cyrus Hamlin, A. G. Paspati & Homan Hallock.

HALL, James. Remarks upon casts of mud furrows, wave lines and other markings upon rocks of the New York System. R. 1843. p. 422–32, 1 pl. Rd Apr. 29.

ROGERS, H. D. An inquiry into the origin of the Appalachian coal strata, bituminous and anthracitic. R. 1843. p. 71, 433–74. Rd Apr. 29.

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ROGERS, W. B., and ROGERS, H. D. On the physical structure of the Appalachian chain, as exemplifying the laws which have regulated the elevation of great mountain chains generally. R. 1843. p. 70–1, 474–531, 4 pl. Rd Apr. 29.

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1843 Dana, J. D. On the analogies between the modern igneous rocks and the so-called primary formations, and the metamorphic changes produced by heat in the associated sedimentary deposits. Rd Apr. 26.
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Remarks by Espy, W. C. Redfield, p. 138–40; C. T. Jackson, p. 140–41; J. D. Dana, p. 141–42; E. Emmons & H. D. Rogers, p. 142.

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BUCKLEY, S. B. Notice of the discovery of a nearly complete skeleton of the Zygodon of Owen (Basilosaurus of Harlan) in Alabama. Rd Apr. 29.

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REDFIELD, W. C. Remarks on some new fishes and other fossil memorials from the new red sandstone of New Jersey. Rd Apr. 29.

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HAYES, J. L. Probable influence of icebergs on drift. Rd Apr. 29.

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————. Paper in explanation of two sections at Portage, N. Y. Rd Apr. 29.

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HITCHCOCK, Edward. Discovery of more native copper in . . . Whately, Mass., in the valley of the Connecticut River, with remarks upon its origin. Rd in Apr.

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NATIONAL INSTITUTION FOR THE PROMOTION OF SCIENCE, WASHINGTON, D. C. (1840)

History

"The NATIONAL INSTITUTION FOR THE PROMOTION OF SCIENCE was organized at the seat of government on the 15th day of May, 1840, by the adoption of a Constitution, and a declaration of the objects of the Institution, which are to promote science and the useful arts and to establish a National museum of natural history . . .

"The following officers were appointed to continue until the annual meeting in January, 1841: directors, Joel R. Poinsett and James K. Paulding, respectively Secretaries of War and Navy; councillors, J. Q. Adams, J. J. Abert, J. G. Totten, Alexander McWilliams, H. O. Dayton; treasurer, W. I. Stone; secretary, Francis Markoe, Jr., and P. Thompson" . . . From its Bull. v. 1, no. 1, p. 3. The first meeting of the Institution was held on the second Monday in June 8, 1840, in the rooms of the Institution. It was incorporated by Congress; held monthly meetings and issued a volume of Proceedings in the form of three Bulletins, between 1840 and 1845 (see Bibliography below).

" . . . It gathered together a small but useful library . . . The Museum of Natural History is magnificent. No other Society probably has done so much in so short a time. Their collection would do honor to some of the older societies of Europe. It is housed on the second floor of the Patent Office. Congress has lately appropriated $20,000 for arranging and putting up the articles brought home by the recent government exploring expedition (WILKES U. S. EXPLOR. EXPED. (1838), q.v.) . . . From the AMER. QUART. REGISTER. v. 15, p. 180. Nov. 1842. (William COGSWELL).

Of the several departments provided for in the constitution, no. 2 was known as the geology and mineralogy department, and no. 4 as the natural history department. The first was organized on Aug. 10, 1840, with J. J. Abert, T. P. Jones and A. O. Dayton as a committee in charge. In 1841 the committee consisted of Frederick Hall, Henry King and J. J. Abert. The second was organized on July 13 (i.e., the natural history dept.), with Levi Woodbury, J. G. Totten and G. Talcott as the committee.

From 1840 to 1844 Poinsett was president of the Institute as it later became known. Levi Woodbury served in 1845. The curators of the Institute were at various times Henry King, Frederick Hall, Charles Pickering, J. D. Dana, W. D. Brackenridge. Charles Wilkes was in charge of the Exploring Expedition collections.

In 1841 the Institution received the effects, books, etc., of a former Washington Society, the COLUMBIAN INSTITUTE FOR THE PROMOTION OF ARTS & SCIENCES (1816), q.v. In 1844 a national meeting was held at Washington from April 1–10, at which many scientific papers were read, and which was attended by the leading political and scientific men of the day. In this year the Institution petitioned Congress for financial support, and with the failure of Congress to comply with the request, it started on the road to extinction.

The charter expired in July, 1862, and the museum and library were turned over to the SMITHSONIAN INSTITUTION (1846), q.v., which received extensive collections in mineralogy and ethnology.

The Institution was, however, temporarily revived as a local scientific society in 1855 under the name of the National Institute. It issued some Proceedings (see below PAPERS ON NATURAL HISTORY). Its presidents were Peter Force in 1855, and Matthew F. Maury in 1856–57.

A very full history of the NATIONAL INSTITUTE (1840–1862) by RATHBUN, at this writing, is still in MSS at the U. S. National Museum.

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Dated Feb. 3, 1845.

1850 ———. Report of the Recording Secretary of the National Institution . . . for the year 1850, rendered December 2, 1850 . . . Wash. Printed by R. A. Waters, 1850. 10 p.

1855 NATIONAL INSTITUTE. Proceedings of the . . . new series. Wash. [For Jan. 1855–Jan. 1857] 1857. v. 1, no. 1–3.

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HUNTER, Alfred. A popular catalogue of the extraordinary curiosities in the National Institute, arranged in the building belonging to the Patent Office; curiosities collected from all parts of the world, by the officers of the army and navy of the United States. Wash. Hunter, 1855. 72 p.

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Repr. in (U. S. Nat. Mus. Ann. Rept. for 1897. Wash. 1901. pt. 2, p. 467–77)—Memorial to G. B. Goode.

The Congress was held under the auspices of the Nat. Inst.

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v. 1, for 1840–1845. 477 p. 5 pl.
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    no. 3, Mar. 1857.

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WEBSTER, Daniel. . . . Respecting the transfer of the collections of the National Institution, from the basement story to the spacious upper rooms in the new Patent Office. P. v. 1, bull. no. 2, p. 100–1. Rd Aug. 9.

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ENGELMANN, George. Collection of plants . . . P. v. 1, bull. no. 2, p. 118–19. Rd Nov. 8.

Foreman, E. R. Plan of exchanges. . . P. v. 1, bull. no. 2, p. 168–71. Written Dec. 10.

Markoe, Francis, Jr. List of fossils collected in Calvert and St. Mary's County, Maryland. . . P. v. 1, bull. no. 2, p. 132. Rd Dec. 13.

1842 Conrad, T. A. Observations on a portion of the Atlantic Tertiary region, with a description of new species of organic remains. P. v. 1, bull. no. 2, p. 171–94, 1 pl.

Harlan, Richard. Description of a new species of extinct Dolphin from Maryland (Delphinus Calvertensis). P. v. 1, bull. no. 2, p. 195–96, 1 pl.

Webber. Samuel. Sketch of the great geological features of the valley of the Connecticut River, at Charlestown, N. H., and remarks on some crystals found in the slaterock scattered in that region, with specimens. P. v. 1, bull. no. 2, p. 197–200, illus.

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Townsend, J. K. List of fossils collected for the National Institute. . . . P. v. 1, bull. no. 3; p. 260. Rd Oct. 10.

Totten, J. G. List of a cabinet of minerals presented to the National Institution. . . Wash. 1842. 30 p.

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1843 Browne, P. A. An essay on solid meteors, and aerolites or meteoric stones. Phila. 1844. 38 p. Rd in 1843.

Originally pres. to Chester Co. Cab. Nat. Sc. (1826), in 1841.

Mussey, R. D. Catalogue of Ohio Valley shells. P. v. 1, bull. no. 3, p. 296–97. Rd May 8.

1844 Walker, R. J. Introductory address of the director of the National Institute. P. v. 1, bull. no. 3, p. 439–50. Rd Apr. 1.

Natural history, p. 447–49.

Morris, J. G. On the past and present state of entomological science in the United States. P. v. 1, bull. no. 3, p. 430. Rd Apr. 3.

In Amer. J. Sc. (1818), v. 51 (ser. 2, v. 1), p. 17–27. Jan. 1846.

Hodgson, W. B. On the Megatheroid fossils of the Atlantic coast of Georgia. P. v. 1, bull. no. 3, p. 431. Rd Apr. 3.

Foreman, E. R. On domestic exchanges in natural history and geology. P. v. 1, bull. no. 3, p. 431. Rd Apr. 3.

Bache, A. D. On the conditions of science in the United States and Europe. P. v. 1, bull. no. 3, p. 431. Rd Apr. 4.

Browne, P. A. On an improved method of teaching the natural sciences. P. v. 1, bull. no. 3, p. 431. Rd Apr. 4.

Mather, W. W. On the physical geology of the United States. P. v. 1, bull. no. 3, p. 431. Rd Apr. 4.

Also rd before Assoc. Amer. Geol. & Nat. (1840) May 8, 1844. In its Proc. 1844. p. 2–5 (Abstr.) Pub. in full in Amer. J. Sc. (1818), v. 49, p. 1–20, 284–301. July & Oct. 1845. See also Merrill (1), p. 394–96.

See also Merrill. First 100 yrs. Amer. Geol. 1924. p. 252–54.

Agnew, J. H. On the glacier system or ice-period of Agassiz. P. v. 1, bull. no. 3, p. 431. Rd Apr. 4.

Locke, John. On Lake Superior, embracing an account of miscellaneous observations on the geology, mineralogy, topography, scenery, climate, meteorology . . . of the Lake. P. v. 1, bull. no. 3, p. 432. Rd Apr. 5.

1845 Bailey, J. W. Notes on the Polythalamia. P. v. 1, bull. no. 3, p. 432. Rd Apr. 6.

1854 Jarvis, James. On the Teredo, or salt-water worm. P. n.s. v. 1, no. 2, p. 60–7. Rd Oct. 16.

1855 Girard, Charles. Life in its physical aspects. P. n.s. v. 1, no. 1, p. 2–22. Rd Jan. 15.

Gale, L. D. On the oaks of the District of Columbia. P. n.s. v. 1, no. 2, p. 67–78. Rd May 21.

Originally rd Nov. 21, 1853.

Girard, Charles. Catalogue of recent shells and other Molluscs found in the District of Columbia prepared from specimens in the cabinet of Dr. E. Foreman. P. n.s. v. 1, p. 78–82, 1 pl. Rd Apr. 16 & June 11.

1856 Blake, W. P. On the rate of evaporation on the Tulare Lakes of California. Rd March 4.

In Amer. J. Sc. (1818), v. 71 (ser. 2, v. 21), p. 365–68. May, 1856. See also Pacific RR. Surv. (1853), v. 5, Williamson's Exped.

Antisell. Thomas. On the Bokkeveld mineral, a meteorite forwarded from the Cape of Good Hope, by J. Chase. P. n.s. v. 1, no. 3, p. 114–16. Rd Dec. 16.

1857 Newberry, J. S. Fossil fishes from the Devonian rocks of Ohio. P. n.s. v. 1, no. 3, p. 119–26, illus. Rd Jan. 26.

Rev. in Amer. J. Sc. v. 74 (ser. 2, v. 24), p. 147–49. July, 1857.

NATURAL HISTORY SOCIETY OF GENEVA COLLEGE, GENEVA, N. Y. (1840)

History

"The Natural History Society of Geneva College (now Hobart College), at Geneva, N. Y., was organized in 1840, and held its first meeting on November 5 of that year. After an existence of five years, it apparently no longer held meetings. The minutes of 1843 (those of 1844 have been torn from the book), show much dissension and unpleasantness.

"In 1851 (?), under date of May 24, the minutes read as follows: 'The following gentlemen met on this day to re-organize the Natural History Society of Geneva College, which had been very much neglected since 1845.' Among other changes in the Constitution, the name was changed to the 'Natural History Society of Hobart College' . . . These changes are entered in the Constitution as May 24, 1854; the date of the minutes of the first meeting of the re-organized society, was May 24, 1851; and following is a meeting dated . . . 1853 . . .

"The Society was organized by the students of Geneva College which included the Geneva Medical College . . . and any student belonging to Geneva College was eligible, provided that he gained the votes of two-thirds of the members of the Society . . . Officers seem to have been elected three times a year. There were no papers printed . . .

"The Society appears to have had a Cabinet for which curators were elected each year, and to which various additions were made from time to time, by purchase and gift. The Constitution provided that, in the event of the Society ceasing to exist, the Cabinet should be turned over to the College . . ." From a letter, written by J. S. FOWLER, in 1915, assistant librarian of Hobart College Library.

NORTHERN ACADEMY OF ARTS AND SCIENCES, HANOVER, N. H. (1841)

History

"A number of gentlemen from Vermont, Massachusetts, and this state, assembled at Hanover, at the study of President Lord, June 24, 1841, for the purpose of forming the Northern Academy of Arts and Sciences. The object of the Academy shall be the cultivation of the arts and the sciences, with a view to the interest and happiness of mankind."

The officers of the Society were: Joel Parker, president; Nathan Lord, vice-president; curators, Phineas Cooke, Ebenezer Tracy, Charles B. Haddock, Roswell Shurtleff, Dixi Crosby, Amos Blanchard, Edwin D. Sanborn, David Pierce, Oliver P. Hubbard, William Cogswell and William H. Duncan.

In 1849, the Society had 1,300 volumes in its library and maintained a natural history cabinet of some size. The chief workers of the Society during its rather brief existence were the professors and students of Dartmouth College.

Annual Reports were published in 1842 and 1843 (see below: BIBLIOGRAPHY).

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1842 NORTHERN ACADEMY OF ARTS AND SCIENCES. Constitution and by-laws . . . and first annual report of the curators. Hanover, N. H., W. A. Patten, printer, 1842. 28 p.

Contains, on p. 12–26, a review of the various American scientific societies then in existence (see under ANNOTATED BIBLIOGRAPHY: COGSWELL).

1843 ———. Constitution and by-laws . . . second annual report of the curators, presented July 25, 1843. Hanover, N. H., 1843. 18 p.

1913 LORD, J. K. The Northern Academy of Arts and Sciences. Concord, N. H., 1913. (In his History of Dartmouth College: 1815–1909. p. 548–51)

AMERICAN ETHNOLOGICAL SOCIETY, NEW YORK CITY (1842)

History

"The AMERICAN ETHNOLOGICAL SOCIETY was established for the promotion of a most important and interesting branch of knowledge, that of man and the globe he inhabits, as comprised in the term ethnology in its widest acceptation. Its first meeting was held on the 19th of November, 1842. During the winter months since that time, it has had regular meetings at which papers connected with ethnological science have been read and discussions on similar subjects have received the attention of the Society . . ." Preface, p. 9–10 of Transactions. v. 1, 1845.

The Society published three volumes of Transactions in 1845, 1848 and 1851, respectively. In 1860–61, it published a Bulletin. The Society was inactive for a number of years, and in 1871 was revived as the Anthropological Institute.

Its first president was Albert Gallatin, and H. R. Schoolcraft was one of the early vice-presidents. In 1853 the president was Edward Robinson, and in 1860, it was George Folsom.

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1845 AMERICAN ETHNOLOGICAL SOCIETY, NEW YORK CITY. Transactions of the . . . N. Y., 1845–51. 3 v.

For dates of publication of separate volumes, etc., see below TRANSACTIONS.

The Constitution of the Society is given in v. 1, pref. p. 1–4, 1845.

1860 ———. Bulletin of the . . . N. Y., 1860–61. 72 p.

Contains proceedings for Sept.–Oct. 1860 to Jan. 1861.

1871 ANON. The American Ethnological Society. (In Anthropological Institute. Jour. v. 1, p. 15–6. 1871)

Transactions (T)

Dates of Publication, etc.

v, 1, 1845, 14 + 491 p. illus. pl.
v. 2, 1848, 188 + 298 p. illus. pl. maps.
v. 3, 1851, 202 p. illus. pl.

Papers on Natural History

1845 SCHOOLCRAFT, H. R. Observations respecting the grave Creek Mound in Western Virginia; the antique inscription discovered in its excavation; and the connected evidences of the occupancy of the Mississippi Valley during the Mound period and prior to the discovery of America by Columbus. T. v. 1, art. 3, p. 367–420, pl.

1846 MORTON, S. G. Account of a craniological collection with remarks on the classification of some families of the human race. T. v. 2, art, 4, p. 215–22.

1847 BARTLETT, J. R. The progress of ethnology: An account of recent archaeological, philological and geographical researches in various parts of the globe, tending to elucidate the physical history of man. N. Y. 1847. 151 p.

Appeared as an Appendix to T. v. 2.

1848 GALLATIN, Albert. Hale's "Indians of North-West America, and Vocabularies of North America," with an introduction by Albert Gallatin. T. v. 2, art. 1, pref. p. 23–188.

See also following entry.

HALE, Horatio. Indians of North America. T. v. 2, art. 1, p. 1–130.

See also preceding entry.

1848 SQUIER, E. G. Observations on the aboriginal monuments of the Mississippi Valley. . . T. v. 2, art. 2, p. 131–207.

Extracts from SQUIER & DAVIS. Ancient monuments of the Mississippi Valley. . . Acc. by Smith. Inst. (1846), in June, 1847. Pub. in 1848. In its Smith. Contr. to Knowledge. v. 1 (pub. no. 1).

1851 Bartram, William, and Squier, E. G. Observations on the Creek and Cherokee Indians, 1789, by William Bartram; with prefatory and supplementary notes by E. G. Squier. T. v. 3, p. 1–81.

BOTANICAL SOCIETY OF WILMINGTON, DELAWARE (1842)

History

The Botanical Society of Wilmington, Delaware, was organized on January 16, 1842, with the following officers: Samuel Hilles, president; Edward Tatnall, vice-president; J. H. Barkley, secretary; Edward Bringhurst, treasurer; Edward Tatnall, Jr., W. S. Hilles, and Dubre Knight, curators. The object of the Society was ''to arouse and sustain an interest in the study of botany, the most pleasant of all the natural sciences.'' The Society appears to have been in existence for about nine years. SCHARF, J. T. History of Delaware. v. 2, p. 837.

Below are given the titles of a few papers read before the Society during its brief existence.

Papers on Natural History

1844 Darlington, William. A lecture on the study of botauy. . . Wilmington, Del., 1844. 24 p.

Rd March 2, 1844, before the Ladies' section.

Dolph, J. M. Catalogue of the phaenogamous and filicoid plants of New Castle County, Delaware. . . Wilmington, Del., 1844. 12 p.

Addenda, 1846. 2 p.

1849 Gorgas, J. On certain frozen leaves.

In Amer. J. Sc. (1818), v. 58 (ser. 2, v. 8), p. 286–87. Sept. 1849.

ENTOMOLOGICAL SOCIETY OF PENNSYLVANIA, YORK, PA. (1842)

History

''About three years ago [August 23, 1842] five gentlemen devoted to the study of entomology, established a Society under the above designation. The first meeting was held in York, [Pa.], when the constitution was adopted and arrangements made to prosecute their favorite pursuit with combined energy. Dr F. E. Melsheimer, of Dover, York Co., whose venerated sire was the father of entomology in this country, was very properly elected president. The Society has held several meetings every year since its organization, and though the members are but few, yet they have contributed to the promotion of science in our country . . .

"The Society has described and published in the Proceedings of the Philadelphia Academy of Natural Sciences more than 500 new species of Coleoptera (beetles) . . . [See Papers below].

"One of the members has just finished a full monograph of our American Longicornes (beetles with long antennae) which will be published in the Transactions of the American Philosophical Society (see below).

"But the principal work upon which the Society has been engaged for the last two years, is a Catalogue of the Coleoptera of the United States . . . The principal credit of this work is due to the President, Dr Melsheimer . . .

"It will be the next business of the Society to study and describe our numerous nocturnal Lepidoptera which have not yet been noticed by previous authors . . ." From the Literary record of the Linnaean Association of Pennsylvania College (1844), Gettysburg, Pa., v. 1, p. 72–3, Feb. 1845.

An account of the formation of the Society and some of its Proceedings may also be found in the Amer. J. Sc. v. 44, p. 199–200, Jan. 1843. Its officers were F. E. Melsheimer, president; S. S. Haldeman, vice-president; Rev. D. Ziegler, recording secretary; Rev. J. G. Morris, corresponding secretary.

Below is given a list of some of the papers read before the Society by its members during a brief existence.

Papers in Society Transactions

1844 Ziegler, Daniel. Descriptions of new North American Coleoptera.

Rd before Phila. Acad. Nat. Sc. (1812), April 9, 1844 & April 8, 1845. In its Proc. v. 2, p. 43–7, 266–72.

Le Conte, J. L. Descriptions of new species of North American Coleoptera.

Rd before Phila. Acad. Nat. Sc. (1812), April 9, 1844. In its Proc. v. 2, p. 48–53.

Melsheimer, F. E. Descriptions of new species of Coleoptera of the United States.

Rd before Phila. Acad. Nat. Sc. (1812), April 23, May 12, Aug. 6, & Sept. 22, 1844 & Jan. 7, 1845.
In its Proc. v. 2, p. 26–43, 98–118, 134–60, 213–23, 302–18; & v. 3, p. 53–66, 158–81.

1845 Haldeman, S. S. Material towards a history of the Coleoptera Longicornia of the United States.

Rd before Amer. Phil. Soc. (1769), Jan. 17, 1845 & Dec, 3, 1847. In its Trans. n.s. v. 10, p. 27–66 & Proc. v. 4, p. 371–72 (additions & corrections).

FREMONT'S EXPEDITION BETWEEN THE MISSOURI RIVER AND THE ROCKY MOUNTAINS (1842)

History

Early in 1842, J. C. Fremont was ordered "to explore and report upon the country lying between the frontiers of Missouri, and the South Pass in the Rocky Mountains, and on the line of the Kansas and Great Platte Rivers. He proceeded up the Kansas River to the Little Vermilion, northwest toward the Platte River, to Fort Kearny. Lt. Fremont continued up the Platte to the forks. The party with Charles Preuss (the topographer) proceeded along the north Fork to Fort Laramie; Fremont's party went along the south Fork to St. Vrain's Fort, north to Laramie; up to the North Fork to Sweetwater River, and to its source in the South Pass, northwestward along the foot of Wind River Range to parallel of 43 degrees—ascended a peak, 13,570′ high . . ." FREMONT, J. C.

The party left St. Louis May 22, 1842, and remained in the field the larger part of the year. Lt. Fremont was assisted by Charles Preuss as topographer, and Kit Carson, who acted as guide. Report on the Expedition was rendered Mar. 1, 1843. The botanical collections were described by John Torrey, and some geological observations were made by J. D. Dana. The House edition of Fremon't Report was published in 1843, the Senate ed., in 1845. It was also published as part of FREMONT'S EXPED. TO CALIFORNIA & OREGON (1843), q.v., in 1845. For further details of route traversed, see WARREN, p. 42–3.

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1849 FREMONT, John Charles. Narrative of the Exploring Expedition to the Rocky Mountains in the year 1842, and to Oregon and California in the years 1843–44 . . . N. Y. Appleton, 1849. 186 p.

A popular edition of the Official Report (see below).

———. Notes of travel in California, comprising the prominent geographical, agricultural, geological and mineralogical features of the country; also, the route from Fort Leavenworth in Missouri, to San Diego, in California, from the official reports of Col. Fremont and Maj. Emory. N. Y. Appleton, 1849. 29 + 83 p. maps.

Dublin ed., J. M. M'Glashan, 1849. 311 p. 12°.

1850 ———. The Exploring Expedition to the Rocky Mountains, Oregon and California; to which is added a description of the physical geography of California, with recent notices of the gold region from the latest and most authentic sources. Buffalo & Cleveland, 1850. 456 p. illus.

1887 ———. Memoirs of my life, including in the narrative five journeys of western exploration, during the years 1842, 1843–4, 1845–6–7, 1848–9, 1854 . . . Chicago & N. Y., Bedford, Clarke & co., 1887. 2 v. 19 + 655 p. front. pl. port. illus.

1891 O., M. N. Resume of Fremont's expeditions. (In Century Mag. n. s. v. 19, p. 759–66. Mar. 1891)

FREMONT, Jessie Benton. The origin of the Fremont Explorations. (In Century Mag. n. s. v. 19, p. 766–71, port. Mar. 1891)

McGEHEE, Micajah. Rough times in rough places; a personal narrative of the terrible experiences of Fremont's fourth expedition. (In Century Mag. n. s. v. 19, p. 771–80. Mar. 1891)

Reports

(1) Senate ed. Serial no. 416

1843 FREMONT, John Charles. A report on an exploration of the country lying between the Missouri River and the Rocky Mountains on the line of the Kansas and Great Platte Rivers. Washington, 1843. 207 p. 5 pl. map. tab. (In U. S. 27th Cong., 3rd sess., Sen. Doc. v. 4, no. 243). Serial no. 416.

Rendered Mar. 1, 1843.

(2) H. Executive ed., Repr. in 1843 Exped. of Fremont's
Serial no. 467

1845 ———. Same . . . Wash. 1845. (In U. S. 28th Cong., 2d sess., H. Ex. Doc. v. 4, pt. 2, no. 166, p. 7–101). Serial no. 467.

Included in Report of Fremont's Exped. Oregon & California (1843), q.v.

(3) Repr. in 1843 Exped. of Fremont's. (Senate).
Serial no. 461

———. Same . . . Wash. 1845. (In U. S. 28th Cong., 2d sess., Sen. Doc. v. 11, no. 174, p. 7–101). Serial no. 461.

Fremont's Report rev. in Amer. J. Sc. v. 53, (ser. 2, v. 3), p. 192–202. Mar. 1847.

Also rev. in Mag. Horticulture & Bot. v. 12, p. 86–94. Feb. 1846.

Contents of Report.

pt. 1, p. 7–76 Fremont, J. C. Narrative of the Expedition. Treated chronologically. Contains some geological and mineralogical matter, etc., by J. D. Dana.

Repr. in Serials no. 461 & 467 (1845 repr.), p. 9–79. (2) & (3)

pt. 2, p. 77–94 Torrey, John. Catalogue of plants collected by Lt. Fremont in his Expedition to the Rocky Mountains.
Written Mar. 1843. In Repr. (1845), Serials no. 461 & 467, p. 81–98. (2) & (3)

p. 95–183 Astronomical observations.
In Serials no. 461 & 467, p. 99–101, & p. 585–669 (Serial no. 461), & p. 559–93 (In Serial no. 467). (2) & (3)

p. 185–207 Meteorological observations.
In Serials no. 461, (p. 671–93) & no. 467, (p. 559–83). (2) & (3)

Papers in Society Transactions

1844 Gray, Asa. Characters of some new genera and species of plants of the natural order Compositae, from the Rocky Mountains and Upper California.
Rd before Bost. Soc. Nat. Hist. (1830), Dec. 4, 1844. In its Jour. v. 5, p. 104–11, 1 pl. Jan. 1845. Abstr. in its Proc. v. 1, p. 210–12. Mar. 1845.

1850 Torrey, John. . . . Plantae Fremontianae; or, Descriptions of plants collected by Col. J. C. Fremont in California.
Acc. by Smith. Inst. (1846), Sept. 1850. In its Smith. Contr. K. v. 6, art. 1, 24 p. 10 pl. [89 fig.] Pub. Apr. 1853.
Rev. in Amer. J. Sc. v. 66, (ser. 2, v. 16), p. 424–25. Nov. 1853.

LYNN NATURAL HISTORY SOCIETY, LYNN, MASS. (1842)

History

The Lynn Natural History Society was formed on August 3, 1842. It had a fairly active career for several years, collecting specimens and building a cabinet. B. F. Mudge was its first president and most active member. In 1846, the Society published "A Catalogue of Birds," by J. B. Holder, constituting no. 1, of its "Publications."

"Its purpose was to encourage the study of natural history." The Society made a collection of minerals, geological, botanical and zoological specimens. Its chief members were local physicians amongst whom William Prescott was the most active. In 1850, the Natural History Society took over the books and other property of the Social Library; and in 1855 the Natural History Society ceased to exist with the transfer of the entire collection of books and specimens to the Library Association, which became the Lynn

Free Library Association in 1862.'' (Information from C. E. Sherman, Librarian, Lynn Public Library. May, 1921).

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Copies examined at the American Museum of Natural History Library.

FREMONT'S EXPEDITION TO OREGON AND CALIFORNIA (1843)

History

''In pursuance of your instructions to connect the reconnoissance of 1842, which I had the honor to conduct (see FREMONT'S EXPED. BETWEEN MISSOURI RIVER & ROCKY MTS. (1842)), with the surveys of Commander Wilkes on the coast of the Pacific Ocean (see WILKES U. S. EXPLOR. EXPED. (1838)), so as to give a connected survey of the interior of our continent, I proceeded to the Great West early in the spring of 1843, and arrived on the 17th of May, at the little town of Kansas, on the Missouri frontier, near the junction of the Kansas River with the Missouri River, where I was detained near two weeks in completing the necessary preparations which my instructions contemplated . . .'' J. C. FREMONT.

Fremont's explorations were carried on until Aug. 6, 1844, when the party disbanded at St. Louis. Fremont was assisted by Charles Preuss, topographer, and Thomas Fitzpatrick, guide. He rendered his Report, Mar. 1, 1845, and it was published the same year. It included his 1842 journey (see above). For an account of the routes traversed, see also WARREN, p. 46–9.

Fremont wrote the narrative of the Expedition; James Hall, the geology and palaeontology; John Torrey, the botany; and J. W. Bailey, the Infusoria. See also PAPERS IN SOCIETY TRANSACTIONS, for several published elsewhere.

Most of Fremont's specimens were destroyed by a flood in Kansas on his return to Washington. More than half of the specimens were either ruined or lost.

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IOWA HISTORICAL AND GEOLOGICAL INSTITUTE, BURLINGTON, IOWA (1843)

History

"The Iowa Historical and Geological Institute was organized at Burlington, Iowa, on December 18, 1843, but ten years after the departure of the red men, by four citizens of this city, and now (December, 1849), has over thirty members. The object shall be the establishment of a cabinet of curiosities, of a library and of a depository of records and papers relating to the primitive settlement, early history and geological features of Iowa. The objects of the Association have steadily been kept in view, and constant additions are being made to the historical and geological departments. The geological and mineralogical specimens amount to about two thousand and some of them are exceedingly rare and valuable.'' Letter from David RORER, corresponding secretary of the Institute, to the Smithsonian Institution, 1849. (In JEWETT, C. C. Report on Public Libraries of U. S. Smith. Inst. Ann. Rept. for 1849. 1850. appx. p. 185).

The Society maintained an active existence until about 1865, or somewhat earlier, when a fire destroyed the collections and records of the Society. The officers for 1859, when the Society met regularly the first Tuesday of every month, were W. Salter, president; David Rorer, vice-president; A. D. Green, recording secretary; P. Harvey, corresponding secretary; W. D. Gilbert, treasurer; R. M. Green, librarian. (Information received from Cora Poor Millard, librarian, Free Public Library, Burlington, Iowa, May, 1921).

John Henry Rauch, physician and botanist, was for a time an active member of the Institute.

NEW YORK STATE CABINET OF NATURAL HISTORY, ALBANY, N. Y. (1843)

History

In connection with the NATURAL HISTORY SURVEY OF NEW YORK (1836) q.v., which was carried on between 1836 and 1843, very large collections in the zoology, botany, geology, mineralogy, agriculture and palaeontology were made by the scientists engaged in the prosecution of the survey of the state.

By virtue of an act passed April 8, 1843, by the state legislature, arrangement was made for the care and exhibition of the specimens collected, thus creating what subsequently became known as the NEW YORK STATE CABINET OF NATURAL HISTORY.

The collections were kept in what was then known as the old State Hall in Albany, the authorization for the same having been made by an act passed April 12, 1842, and approved by Gov. W. H. Seward.

Ebenezer Emmons, one of the geologists of the state survey, and later in charge of the agriculture of the state, was placed in charge of the collection. This arrangement continued until 1845, when an act passed May 10 of that year, placed the ''State Cabinet of Natural History'' in the care of the Regents of the University of the State of New York.

On May 3, 1847, the first appropriation of $150 was granted "for preserving and adding to the collections in the same . . ." Further appropriations were made during 1847 and 1848, making the annual sums appropriated approximately $500. Grants were made annually from this time on, but they were small and insufficient for the effective conduct and maintenance of the Cabinet.

The Regents appointed John Washington Taylor as its first curator of the Cabinet who was succeeded on Nov. 1, 1849, by John Gebhard, Jr. James A. Hurst was also engaged in the capacity of taxidermist. In 1857 Ezekiel Jewett was appointed in succession to Gebhard, and in 1866 James Hall was made curator upon the resignation of Jewett, dated November 1, 1865.

In 1849, the Antiquarian and Historical collections were also placed under the supervision of the State Cabinet. In 1848, on April 11, the Regents of the University made their first annual report, and submitted one annually thereafter. Up to 1866 nineteen of these were made, each accompanied by papers concerning the collections. (See below ANNUAL REPORTS & PAPERS ON NATURAL HISTORY IN REPORTS).

In 1852, the Regents of the University purchased the palaeontological collection of John Gebhard, Jr., for $2,000, and on Aug. 27, 1856, inaugurated the opening of a building especially erected for the purpose of housing the collections, the State Geological Hall. Addresses were made by Edward Hitchcock and Chester Dewey on the early days of geology and mineralogy in the United States.

With a view to determining what

> " . . . Means may be necessary, with a plan, for placing the state cabinet of natural history in the condition required by the present state of science, and to maintain in full efficiency as a museum of scientific and practical geology, and comparative zoology; and whether the establishment of a system of free lectures in connection with the cabinet is desirable, and if so, on what general plan the same should be founded . . ."

the Regents of the University sent a circular letter requesting suggestions, from the following leading scientists of the day: James D. Dana, W. E. Logan, Thomas Sterry Hunt, Alexander Winchell, Oren Root, F. B. Hough, A. A. Gould, and J. J. Thomas.

The Cabinet was reorganized in accordance with the plans of the Regents and the suggestions made by the men named above, and placed under the supervision of James Hall, then the state palaeontologist. In 1870, by act of May 2, the present New York State Museum of Natural History was created (for the subsequent history of which, see entries below in the Bibliography).

A comprehensive account of the State Cabinet and State Museum may be found in MERRILL (see Bibliography: 1920, below), in connection with the history of the NATURAL HISTORY SURVEY OF NEW YORK.

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3	1849	Jan. 11, 1850	Sen. 75	175 p. illus. 28 pl.
3		Revised edition	Rev. ed.	183 p. illus. 28 pl.
4	1850	Jan. 14, 1851	Sen. 30	146 p. illus. 5 pl.
5	1851	Feb. 2, 1852	Ass. 122	117 p. illus. 22 pl.
6	1852	Jan. 22, 1853	Sen. 16	35 p.
7	1853	Jan. 18, 1854	Sen. 50	124 + 3 p. illus. 2 pl.
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Hall, James. Preliminary notice of some species of Crinoidea from the Waverly sandstone series of Summit County, Ohio, supposed to be of the age of the Chemung group of New York. p. 50–60. Pub. Nov. 11, 1863.

1865 **v. 18, for 1864.**

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Jewett, Ezekiel. Additions to the Cabinet during 1864 . . . p. 11–6.

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Paine, J. A., Jr. Catalogue of plants found in Oneida County and vicinity. p. 53–192.
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1866 **v. 19, for 1865.**

Regents, Board of. Report. p. 5–7.

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PORTLAND SOCIETY OF NATURAL HISTORY (1843)

History

"The object of the Portland Society of Natural History, from its origin (which may properly be referred to the organization of the Maine Institute of Natural Science, in 1836), as expressed in its Constitution, has ever been to promote a taste for the study of natural history among our citizens and to furnish the necessary facilities for its pursuit, by the collection of a cabinet and library. The study of the natural history of our state, and the practical development of its natural resources have ever been regarded as of primary importance, and to the accomplishment of which its best efforts should ever be directed.

''The Association has struggled with poverty and other adverse influences and on Jan. 8, 1854, suffered the total loss by fire of the cabinet, library and every species of property.

''So complete was the destruction, and so disheartening the effects, that it was doubtful whether the Society would resume its labors or continue its organization. The Society, however, resolved to persevere and it has ever since labored industriously to retrieve its fortunes, and to maintain its position as the leading scientific association of the state of Maine.

''By persevering individual labor, by the contributions of liberal citizens of Portland, and by the aid of the state in the form of a grant of half a township of land, the work has been accomplished. For the last two years, and for the first time in its history, it occupies a building of its own, eligibly situated for its purpose, on Congress Street, in Portland, and well adapted for its present and immediate prospective necessities.

''The possession and occupancy of a building of its own had become a want of primary necessity, but it involved an expense which the funds derived from the liberality of the state, and our own citizens have not been sufficient to defray. The Society, therefore, still labors under the burden of a large debt, the payment of interest on which requires all of its regular annual receipts, thus preventing the purchase of a sufficient quantity of the simplest necessities of such an institution, or of any suitable apparatus for preparing and preserving the numerous specimens which are constantly forwarded from our own and foreign localities . . .

''The active working members constantly devote a large portion of their time and often more substantial aid without desire for pecuniary remuneration, but other sources must be relied upon for the larger and more extensive outlays necessary for the progress and continued existence of the Society . . .

'' . . . With the state of Maine almost entirely unexplored in relation to the scientific and practical resources of land and sea open to its investigations, having the most northerly position in the Republic, for its field of labor; abounding, as we are beginning to discover, in mineral wealth, and new and strange forms of animal and vegetable life the Society ought if properly encouraged, aid greatly in solving many of the unsettled problems of the day and in developing and increasing the natural wealth of the country . . .'' From covers of the Proceedings, Part 1, published by the Society, in 1862.

The first part of the Proceedings, containing pages 1–96, was issued in 1862, and the second part, in 1869, containing pages 97–212. In 1864, the Society published the first and only number of its Journal.

The officers for 1851 were J. W. Chickering, president, William Wood, vice-president, and John Neal, corresponding secretary. In 1862, William Wood was president; Henry Willis, vice-president; Charles B. Fuller, cabinet-keeper; and William Wood, Sylvester B. Beckett, John M. Gould, Benjamin Fogg, G. L. Goodale, C. B. Fuller, Henry Willis, curators.

The contents of the publications of the Society are given below under PAPERS ON NATURAL HISTORY, to 1866.

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1862 ———. Proceedings of the . . . Portland, Printed for the Society by David Tucker, 1862–date. v. 1–date.

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1864 ———. Journal of the . . . no. 1. Portland, 1864. 63 p.

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1865 WILLIS, William. The Portland Society of Natural History. (In his History of Portland, Maine. 1865. p. 750)

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Hitchcock, C. H. Fossils of the Potsdam of North America. P. v. 1, pt. 1, p. 87–90. Rd April 7.

Fuller, C. B. On some fossil shells . . . P. v. 1, pt. 1, p. 91. Rd June 18.

True, N. T. Grooved boulders in Bethel, Maine. P. v. 1, pt. 1, p. 92–4. Rd Sept. 15.

Remarks by Samuel F. Perley, William Wood, and C. H. Hitchcock, p. 94–5.

Wood, William. Remarks upon Tubularian Hydroids. P. v. 1, pt. 1, p. 97. Rd Oct. 20.

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*Dawson, J. W. Letter relative to fossil plants discovered at Perry, Maine . . . (written Nov. 26). P. v. 1, pt. 2, p. 99–100, 1 pl. Rd Dec. 15.

1863 *Billings, E[lkanah]. Description of some new species of fossils with remarks on others already known, from the Silurian and Devonian rocks of Maine (from Square Lake). P. v. 1, pt. 2, p. 104–26, 1 pl. [28 fig.] Rd Jan. 19.

See also Maine Geol. Surv. (1836).

True, N. T. Influence of location on the growth of shells. P. v. 1, pt. 2, p. 126–27. Rd in Jan.

1864 Morse, E. S. Observations on the terrestrial Pulmonifera of Maine, including a catalogue of species of terrestrial and fluviatile Mollusca known to inhabit the state. J. v. 1, no. 1. 63 p. 104 illus. 10 pl. [126 fig.]

1865 Wood, William. Discovery of a heath in Maine. P. v. 1, pt. 2, p. 138–43. Rd Sept. 8.

Smith, S. I. On the Orthoptera of the state of Maine. P. v. 1, pt. 2, p. 143–51.

ALLEN'S EXPEDITION TO THE DES MOINES AND BLUE EARTH RIVERS (1844)

History

Lt. J. Allen led an expedition to the northern portion of Iowa Territory, under military orders, in August, 1844. The party remained in the field until October of the same year. Allen's report was rendered Jan. 4, 1845. It contains some geological observations on the region traversed. For route traversed, see WARREN, p. 43. Report was published in 1846.

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1846 ALLEN, J[ames]. . . . Report of an expedition into the Indian country in the northern part of Iowa Territory in 1844, by Company I, 1st Regiment of Dragoons. Washington, 1846. 18 p. (In U. S. 29th Cong., 1st sess., H. Ex. Doc. v. 6, no. 168). Serial no. 485.

p. 1–7 Report; p. 7–18 Journal.

LINNAEAN ASSOCIATION OF PENNSYLVANIA COLLEGE, GETTYSBURG, PA. (1844)

History

''The Linnaean Association of Pennsylvania College was organized in June, 1844. Its primary object was the cultivation of the study of natural science in the Institution by fostering among its members a spirit of investigation and a love for the works of nature. The Association immediately divided itself into different sections, each section directing its attention to some particular branch of study or department of inquiry. Among the subjects designated are zoology, entomology, ornithology, conchology, mineralogy, botany. Efforts were at once put forth for the formation of a museum, and through the active exertions of the members and the liberality of kind friends quite a handsome collection has already been secured. So rapidly did the cabinet increase that in a short time the room occupied for the purpose was found inadequate to contain all the articles, and hence a little more than a year ago, the Association engaged in the project of erecting a large and commodious hall for the reception of the valuable collection of minerals, shells, birds, quadrupeds, etc. . . . The cornerstone was laid . . . in August, 1846. . . . Soon after the organization of the Society, it was found necessary to have some permanent record to facilitate its operations, and accordingly the Journal was commenced. . . ." From the Literary Record, v. 3, p. 142, 1847 (see below).

The officers were J. G. Morris, the eminent Pennsylvania entomologist, president, and P. A. Browne, F. A. Melsheimer, C. P. Krauth, S. S. Schmucker, Baird, S. F., S. S. Haldeman, J. K. Townsend, and T. R. Peale, vice-presidents, secretaries, etc.

The Linnaean Association was organized on June 8, 1844, by the students of the Pennsylvania College, and the Theological Seminary attached thereto. Thirty-six members joined at the first meeting, and the following were the first officers: J. G. Morris, president; M. Diehl and W. H. Harrison, vice-presidents; J. M. Morris and B. Jadler, recording and corresponding secretary, respectively; J. B. Bittinger, treasurer; P. G. Sauerwein, and G. W. Martin, curators.

Meetings were held on the second Saturday of each month, in the morning. The program consisted of essays, lectures and discussions of assigned topics. The Society's success was undoubtedly due to the activity of Dr. J. G. Morris, the entomologist, a professor at the College.

From Nov. 1844 to October, 1848, the Society published the Literary Record, the contents of which are given below under PAPERS ON NATURAL HISTORY (q. v.). On Sept. 14, 1847, the Linnaean Hall, especially dedicated to the natural sciences, was formally opened, "conceived, designed, erected and completed through the agency of the students of the college," the first successful effort of its kind, said Dr Morris.

The Society built up a large cabinet and was responsible for laying out the campus, walks, trees, etc. Until 1863 the Society maintained an active existence, and annual addresses on natural history and other subjects were delivered at commencement.

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Published monthly. Contents given below.

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Papers on Natural History

1844 **v. 1, no. 1, November.**

MORRIS, J. G. Collections of natural history in colleges. p. 3–5.

————. Capturing, killing and preserving insects. p. 9–11, illus.

v. 1, no. 2, December.

————. (Entomopholis, pseud.) On the rearing of insects for cabinets. p. 19–21.

————. Miscellaneous facts in natural history. p. 23–4.

1845 **v. 1, no. 3, January.**

Say, Thomas. A letter from the distinguished naturalist, Thomas Say, to Rev. J. F. Melsheimer. p. 37–8. Written June 10. 1818.

Haupt, H. Hints upon the preparation of zoological specimens. p. 38–41.

Rusticus. Ant-iana; no. 1. p. 42–3.

v. 1, no. 4, February.

Baird, S. F. Contributions toward a catalogue of the trees and shrubs of Cumberland County, Pennsylvania. p. 57–63.

Rusticus. Ant-iana; no. 2. p. 63–4.

Morris, J. G. A new way of destroying the Dermestidae in collections of insects. p. 78–9.

v. 1, no. 5, March.

Foreman, E. The danger bird of New Zealand, Dinornis Novae Zealandiae, Owen. p. 81–4.

Rusticus. Ant-iana, no. 3,. p. 90–3.

Polites. Cabinet of the Linnaean Association. p. 102–4.

v. 1, no. 6, April.

Rusticus. Bots in horses and other animals; no. 1, genus Oestrus Lin. p. 116–18.

Haldeman, S. S. Note on Agrilus ruficollis. p. 119.

v. 1, no. 7, May.

Rusticus. Observations on the bots in horses; no. 2, Oestrus equi. p. 129–32, illus.

————. Ant-iana; no. 4. p. 140–41.

R. The young naturalist. p. 145–47.

v. 1, no. 8, June.

Morris, J. G. Entozoical fungi in insects. p. 153–55, illus

Rusticus. Ant-iana; no. 5. p. 163–65.

v. 1, no. 9, July.

Patterson, H. S. Nugae Ethnologicae; no. 1. p. 177–81

v. 1, no. 10, August.

Morris, J. G. American zoology; no. 1, Entomology. p. 201–3.

v. 1, no. 11, September.

Patterson, H. S. Nugae Ethnologicae; no. 2. p. 225–32.

Reynolds, W. M. How snakes capture their prey. p. 241–42.

v. 1, no. 12, October.

Baird, S. F. Catalogue of birds found in the neighborhood of Carlisle, Cumberland County, Pa. p. 249–57.

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v. 2, no. 1, November.

————. Ravages of the Apate basillaris. p. 7–9.

Anon. 1) Easy method of collecting insects; 2) The naturalists' club, no. 1. p. 13; 14–6.

v. 2, no. 2, December.

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Morris, J. G. A bat and her young Vespertillio. p. 31–3.

————. 1) Ivory nut (Phylelephas macrocarpa); 2) Star nosed mole (Condylura chistata). p. 33–4.

1846 **v. 2, no. 3, January.**

————. The Hydrarchos, or fossil sea-serpent. p. 49–51, 1 pl.

————. Larva or Cicindela. p. 53–5.

Hesperus. The naturalists' club; no. 2. p. 59–61.

W. The rattle-snake (Crotalus horridus). p. 62–5.

v. 2, no. 4, February.

Morris, J. G. The providence of God in the preservation of insects. p. 72–81.

v. 2, no. 5, March.

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F. Exploring naturalists. p. 102–5.

Anon. Geology, no. 1, p. 116–20.

v. 2, no. 6, April.

Morris, J. G. Palaeontology, or fossil remains, no. 2. p. 121–23.

Anon. Geology; no. 2. p. 123–26, secf.

F. Exploring naturalists; no. 2. p. 131–34.

v. 2, no. 7, May.

Morris, J. G. Linnaeiana; no. 1. p. 145–47.

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v. 3, no. 9, July.

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v. 4, no. 1, November.

Anon. Visit to the Schuylkill coal region. p. 1–6.

Anon. The common house fly and other domestic animals. p. 9–12.

v. 4, no. 2, December.

Anon. The great North American coal-field: its original extent, quantity of coal, etc. p. 40–4.

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Browne, P. A. Classification of the Mammalia. p. 63–4.

v. 4, no. 11, September.

Townsend. J. K. Popular monograph of the Acciptrine birds of North America; no. 1: the condor of the Andes (Cathartes gryphus). p. 249–55, 265–72.

v. 4, no. 12, October.

Anon. The study of natural history. p. 273–76.

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MISSOURI HISTORICAL AND PHILOSOPHICAL SOCIETY, JEFFERSON CITY, MO. (1844)

History

"The Missouri Historical and Philosophical Society was founded by a few individuals in 1844. On the 18th of December of that year, a meeting was held in the Senate Chamber at Jefferson City, when measures were taken to organize the Society. Addresses explaining its objects were delivered, a constitution adopted, fourteen names enrolled as members, and a committee appointed to apply to the General Assembly for an Act of Incorporation." Its headquarters were at Jefferson City; and the Society was incorporated February 27, 1845.

"At the annual meeting in 1847 a resolution was passed by the Society providing for a petition to the General Assembly to enact a law for a thorough geological survey of the state, which resulted in the passage of a law providing for . . ." (See Missouri Geological Survey (1853),).

"The Report of the Secretary for the year 1850 stated that the Cabinet contained many valuable geological and mineralogical specimens. . . ." The Society was dissolved late in the winter of 1851. During its existence its president and most active member was William Campbell, presiding officer from 1844 to 1851.

"On July 4, 1848, the president wrote: 'Another important object of the Society is to obtain a large collection of specimens of the minerals and fossils of the state, with correct information as to their extent, locality, and geological position, and to have the same properly classified and arranged for public inspection. Citizens of every county are requested to furnish specimens of the coal, ores, rocks, and petrifactions of their respective neighborhoods, with such information respecting the same as they can obtain. Such a collection, scientifically arranged and classed would enable the people of the state to acquire a more accurate knowledge of the geology and mineralogy of Missouri, and would open the eyes of our public men as to the extent and value of our mineral resources. . . ." All the citations above are taken from the history of the Society, written by W. J. Seever, noted in the Bibliography below (q. v.).

In 1848 the Society published a brief volume of its Annals, which contained a history of the origin and subsequent history of the Society.

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1900 SEEVER, William J. Missouri Historical and Philosophical Society: 1844–51. (In Missouri Hist. Soc. Coll. v. 2, p. 5–11. Jan. 1900)

VERMONT GEOLOGICAL SURVEYS (1844)

History

''The first movement on the subject of a state geological survey of Vermont was made in the General Assembly as early as 1836. In 1837, Gov. Eaton, then chairman of the Committee on Education, made his able Report on the subject, which was never lost sight of till the first act, authorizing a survey was made in 1844. Prof. Charles B. Adams, the first state geologist, entered upon his duties in March, 1845. He made four annual reports which in the aggregate formed a volume of 399 pages with illustrations.

''In 1853 Prof. Zadock Thompson was appointed to take charge of the work upon the decease of Prof. Adams. He never made any formal report, though in other modes, he brought out many facts which were the result of his researches; and the outline of his proposed Report, published by Judge Young, showed how wide were his plans, and how valuable the final result would have been.

''After his decease, another attempt was made to carry forward the survey to completion, by the appointment of the Hon. Augustus Young, as its principal. His feeble health prevented Judge Young from much active labor in the field. But he published a valuable Report on the History of the Survey, in a pamphlet of 88 pages, and then he too died.

''A fourth effort was made by the General Assembly to resuscitate and complete the work in the autumn of 1856, and I was requested to take charge of it. Meanwhile, during the following winter, another heavy providential disaster fell upon the work in the destruction by fire of the fine collections made by Prof. Adams and others, that probably not fifty specimens remain fit to take a place in the new Cabinet . . .'' HITCHCOCK, Edward. Rept. Geol. Vt. 1856. v. 1, p. 9.

During the Adams Survey, 1844–48, Prof. Adams was assisted by Zadock Thompson, S. R. Hall, L. F. Locke, S. P. Lathrop, Edward Hitchcock, Jr., and Denison Olmsted, Jr.

During the Thompson-Young Survey 1853–56, Thompson was assisted by Young, Hall, A. D. Hager, T. S. Hunt and Augustus Wing.

During the Hitchcock Survey, between 1856 and 1861, Prof. Hitchcock was assisted by A. D. Hager, C. H. Hitchcock, Edward Hitchcock, Jr., Leo Lesquereux, and S. R. Hall. See below for the full report of this survey (REPORTS). From 1861–70, A. D., Hager was in charge of the state survey. He was assisted by J. B. Perry, G. M. Hall, Augustus Wing, C. A. Williams and S. R. Hall.

For critical notes on the geological achievements of the surveys, see MERRILL (1), p. 390–92, 469–72 (see Annot. Bib.). For a complete list of the publications on the Survey to be found in the state documents, see HASSE, (2), Vermont. 1907. pt. 3, p. 52–3. (Index. to Econ. Material). See also MERRILL. First 100 yrs. Amer. Geol. 1924. p. 246–49, 350–53.

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1851 THOMPSON, Zadock. . . . On the completion of the state geological Survey. . . . (In House Jour. 1851. p. 411)

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